This is a digital copy of a book that was preserved for generations on library shelves before it was carefully scanned by Google as part of a project to make the world's books discoverable online.

It has survived long enough for the copyright to expire and the book to enter the public domain. A public domain book is one that was never subject to copyright or whose legal copyright term has expired. Whether a book is in the public domain may vary country to country. Public domain books are our gateways to the past, representing a wealth of history, culture and knowledge that's often difficult to discover.

Marks, notations and other marginalia present in the original volume will appear in this file - a reminder of this book's long journey from the publisher to a library and finally to you.

Usage guidelines

Google is proud to partner with libraries to digitize public domain materials and make them widely accessible. Public domain books belong to the public and we are merely their custodians. Nevertheless, this work is expensive, so in order to keep providing this resource, we have taken steps to prevent abuse by commercial parties, including placing technical restrictions on automated querying.

We also ask that you:

+ *Make non-commercial use of the files* We designed Google Book Search for use by individuals, and we request that you use these files for personal, non-commercial purposes.

+ *Refrain from automated querying* Do not send automated queries of any sort to Google's system: If you are conducting research on machine translation, optical character recognition or other areas where access to a large amount of text is helpful, please contact us. We encourage the use of public domain materials for these purposes and may be able to help.

+ *Maintain attribution* The Google "watermark" you see on each file is essential for informing people about this project and helping them find additional materials through Google Book Search. Please do not remove it.

+ *Keep it legal* Whatever your use, remember that you are responsible for ensuring that what you are doing is legal. Do not assume that just because we believe a book is in the public domain for users in the United States, that the work is also in the public domain for users in other countries. Whether a book is still in copyright varies from country to country, and we can't offer guidance on whether any specific use of any specific book is allowed. Please do not assume that a book's appearance in Google Book Search means it can be used in any manner anywhere in the world. Copyright infringement liability can be quite severe.

About Google Book Search

Google's mission is to organize the world's information and to make it universally accessible and useful. Google Book Search helps readers discover the world's books while helping authors and publishers reach new audiences. You can search through the full text of this book on the web at `http://books.google.com/`

HARVARD UNIVERSITY

LIBRARY OF THE

GRADUATE SCHOOL
OF EDUCATION

1. 50

3 2044 102 788 254

Type Lessons

for

Primary Teachers

IN THE STUDY OF

Nature, Literature and Art

Arranged by Seasons for the First Four Grades by

ANNA E. McGOVERN, B. S.

Professor of Primary Methods
Iowa State Normal School

CHICAGO
A. FLANAGAN COMPANY

#AP1291

HISTORICAL TEXTBOOK
QH53
.M13

HARVARD UNIVERSITY
GRADUATE SCHOOL OF EDUCATION
MONROE C. GUTMAN LIBRARY

[redacted]

May 7, 1930

B

Copyright 1905
by
ANNA E. McGOVERN

AUTHOR'S PREFACE

In the preparation of this book it has been the aim to illustrate by concrete examples type lessons in Nature Study, Literature, Language and Picture Study.

The aim of Nature Study is twofold: First, to cultivate the higher nature of the child and lead him toward his Creator; and, secondly, to develop his intellectual powers and lead him to acquire a knowledge of his physical environment.

A careful consideration of this twofold purpose suggests the desirability of correlating Nature Study with literature and art.

In considering the tree, the flower, the bird, or whatever it may be, poems and stories are included in the plan of study, not for the purpose of giving instruction, but to supplement the subject with literature, which will illumine and crystallize the nature lesson and impress correct ideals of truth and beauty.

The educational value of the classic story or poem and the beautiful picture in which true art principles are exemplified, in elevating taste and creating a high standard of the beautiful, can scarcely be estimated.

Early familiarity with some of the masterpieces in art and literature will enable the child "to translate forms of beauty into thought and thought into words," and thus prove a never-failing source of happiness. No more potent agents can be found than the poets and the painters in revealing spiritual beauty, vitalizing the commonplace and moulding the child's thought and expression. The guiding principle in language is, first, impression; then, expression. Some one has said, "The lovely things men build in the days of their strength are but the reproduction of the lovely thoughts that were whispered in their hearts in the days of tender youth."

ACKNOWLEDGMENTS

Mention is particularly made of the following publishers, from whose publications many beautiful and appropriate selections have been taken:

Houghton, Mifflin & Co., Boston.

D. Appleton & Co., New York.

The selections from Lowell, Emerson, Longfellow, Whittier, Holmes, Thoreau, Burroughs, Stedman, Maurice Thompson, Lucy Larcom, Celia Thaxter, Margaret Sangster, Edith Thomas, and the Cary Sisters are used by permission of and by special arrangement with Houghton, Mifflin & Co., publishers of their works.

The selections from Bryant's Poems are used by permission of and by special arrangement with D. Appleton & Co., and the other copyrighted material by permission of Rand, McNally & Co., Silver, Burdette & Co., Milton Bradley & Thomas Charles, Harper & Brothers, Ginn & Co., Donahoe Magazine Co., Educational Publishing Co., National Educational Co., C. W. Barden, E. P. Dutton & Co., Maynard & Merrill, A. C. McClurg & Co., Dana, Estes Co., Public School Publishing Co., J. B. Lippincott Co., Little, Brown & Co., Chas. Scribner's Sons, Small, Maynard & Co., Lee & Shepard, and A. Flanagan Co., to all of whom the author desires to express grateful appreciation of their kindness and courtesy. She also extends sincere thanks to the authors who so cordially granted permission to use their stories and poems.

TABLE OF CONTENTS

AUTHOR'S PREFACE

CHAPTER I

INTRODUCTORY DISCUSSION

PAGE

Quotations from Lowell and Whittier 17
Quotations from Jackman and Van Dyke 18
Quotations from Charles Ham 19
The Book of Nature 20
Teacher's Preparation 21
What Shall the Children Study 22
Summary of Aims 24
Color in Nature 24
Quotations from Wordsworth and Ruskin 25
The Rainbow 26
The Bluebell 27
For Discussion and Reproduction
The Line of Golden Light 28
Study of Poem
The Water Bloom 30
The Rainbow 32
Relation of Nature Study to Literature 32
Extracts from Milton and Coleridge 33
Burroughs on Nature Study 34
A Child's Though of God 37
Poems in Naure 37
Song of Creation 38
The Glory of God in Creation 38
Nature's Miracles 39
The Forest Hymn 40

CHAPTER II

Fall Nature Study 44
Purpose of the Work 44
Each and All 44
Lessons on Plants 45
Quotations from Bryant, Cowper and Wordsworth 45
Quotations from Hodge and Emerson 46
The Forget-Me-Not 47
The Moss Rose 47
The Pansy 48
For Reading and Discussion
The Use of Flowers 48
Quotations from Wilson, Tennyson and Hemans 49
The Morning-Glory 50
A Little Morning-Glory Seed 55

PAGE

TERMS USED IN DESCRIBING FLOWERS 57
THE BUTTERFLY 57
Quotation from Wordsworth 58
Quotation from Wordsworth 60
Quotation from Mrs. Sigourney 61
Quotation from Hamilton Gibson 61
A Little Poet 62
THE MILKWEED 62
A Little Plant 65
Milkweed Babies 66
THE WIND PRINCESS 66
SEVEN TIMES ONE 68
THE POPPY 69
POEM FOR READING AND DISCUSSION
A Poppy Seed 69
GENTIANS 70
The Blue Gentian 71
Legend of the Gentian 71
FLOWERS 72
TREES
Forest Song 74
The American Elm 75
The Oak 77
The Last Dream of the Old Oak 79
The Grave in the Forest 83
The Oak 83
Tree Legends 83
FALL LEAVES 85
Quotations from Thoreau and Gibson 85
Before the Leaves Fall 86
How the Leaves Came Down 87
October's Party 88
Terms Needed in Describing Leaves 89
October 90
The Painter 91
BIRDS
Quotations from Birds and All Nature 92
Quotations from Wordsworth 92
Birds in Summer 94
Questions on Birds 95
Humming-Birds in the Amazon 96
Questions on Birds 96
Quotations from Childs and Bryant 97
Questions on Birds 98
Quotations from May Riley Smith 98
Quotations from Birds and All Nature 99
Study of Pigeon 99
Fable 99
The Dove and the Woodpecker 101

PAGE

BIRDS—Continued.
The Little Doves ... 101
Birdlings Good-Night to the Flowers ... 102
Duck ... 103
Ode to a Waterfowl ... 103
STUDY OF POEM
The Sandpiper ... 105
THE GRAY SQUIRREL ... 106
The Squirrel ... 108
INDIAN CORN ... 108
Feast of Mondamin ... 110
The Farmer and His Sons ... 110
Maize for the Nation's Emblem ... 111
THANKSGIVING DAY
The Landing of the Pilgrims ... 112
Thanksgiving Hymn ... 114
A Thanksgiving ... 114
NOVEMBER ... 116
NOVEMBER ... 117
NOVEMBER ... 117

CHAPTER III

WINTER NATURE STUDY ... 118
THE EVERGREENS ... 118
The White Pine ... 118
Quotation from Wheelock ... 118
Balsam Fir ... 122
Hemlock ... 123
CHRISTMAS THOUGHTS ... 123
Christmas ... 124
Christmas ... 124
A Christmas Tree ... 126
Correggio's Holy Night ... 127
Little Town of Bethlehem ... 128
The Strange Child's Christmas ... 129
Christmas Eve ... 130
FOR READING AND DISCUSSION
The Christmas Bells ... 131
World A Christmas Tree ... 132
A Jewish Legend ... 133
Saint Christopher ... 133
Legend of Saint Christopher ... 134
HIAWATHA ... 135
Hiawatha's School ... 136
Indian Cradle Song ... 138
THE CAT ... 138
The Cat and the Monkey ... 139
Kitten Playing with Leaves ... 140

PAGE

WATER 141
Its Forms and Uses 141
Evaporation 141
Dew 142
Clouds 142
The Cloud 143
Clouds 144
Frost 144
The Little Artist 145
From Vision of Sir Launfal 145
Ice 146
Snow-Flakes 147
A Snow Song 148
Snow 149
Rain 150
Work of Streams 151
Springs 152
The Brook 152
A Song of the Sea 154
A River—By Van Dyke 154
Apostrophe to the Ocean 154
THE SUN 155
Sunbeam 156
The Ferry for Shadowtown 156
The Sun's Travels 156
The Sun 157
THE MOON 158
The Silver Boat 158
The New Moon 159
THE STARS 159
Stars 160
A Legend of the Great Dipper 160
Wynken, Blynken, and Nod 163
BIRDS
Birds of Killingworth 164
Chickadee 165
Outline for Bird Study 166
An Eastern Legend 166
The Blue Jay 167
The Sparrows 168
Birds 170
WINTER AND SPRING 171
Almost Time 172

CHAPTER IV

SPRING NATURE STUDY
Quotations from Cowper and Browning 173
Quotations from Bryant, Hemans and Donahoe 174
Quotations from Hemans 175

PAGE
GERMINATION 175
A Laughing Chorus 176
Waiting to Grow 177
The Little Brown Seed in the Furrow 177
Awakening Life in Seeds 178
SWEET PEA 180
The Pea Blossom 181
SOIL 184
Pebbles and Quartz 185
Feldspar 186
EARTHWORMS 186
Quotation from Cowper 188
THE PUSSY WILLOW 188
TERMS USED IN DESCRIBING BUDS 191
EASTER DRAWETH NEAR 192
EASTER TIME 192
Our Pasque Flower 192
Easter 194
The Lily of the Resurrection 194
Easter 196
Nature's Easter Music 197
Quotations from Wordsworth, Emerson and Browning. 199
The Star That Became a Lily 199
FLOWER-DE-LUCE 201
The Rainbow Queen 202
Iris 202
Flower-de-Luce 203
BIRDS
Sweet Warblers 204
The Empty Nest 205
The Humming-Bird 206
The Bluebird 207
In April 208
The Bluebird 209
Birdies in the Greenwood 209
Song Sparrow 210
Birds Cannot Count 210
Robin 212
The Building of the Nest 213
Robin's Return 214
We Are Red Birds 215
Cradle Song 216
Bird Game 216
SNAILS 218
Quotation from Tennyson 220
Quotation from Wordsworth 220
THE CHAMBERED NAUTILUS 221
THE FROG 222

PAGE

THE WIND 225
The Wind 225
Sweet and Low 226
Orpheus a Myth of the South Wind 227
SPRING FLOWERS 229
Anemone 229
The Bloodroot 230
The Blue Violet 230
Quotation from Gibson 231
Chorus of the Flowers 231
Jack-in-the-Pulpit 232
Jack-in-the-Pulpit 233
The Rose 235
And You Sweet Rose 237
Fern 238
The Grasses 239
Song of Grass Blades 239
THE DANDELION 241
To the Dandelion 245
Legend of the Chrysanthemum or Christ Flowers 246
THE APPLE TREE 247
Talking in Their Sleep 248
An April Welcome 249
Come Let Us Plant the Apple Tree 250
O Painter of the Fruits and Flowers 252
Apple-Seed John 253
Tree Planting 254
The Apple 255
HONEY BEES 256
King Solomon and the Bees 259
Bees 259
RABBITS 260
The Wild Rabbits 265
The Hare and The Tortoise 265
FISHES 265
THE SHEEP AND THE COW 267
SLEEP, BABY, SLEEP 268

CHAPTER V

LANGUAGE THOROUGH LITERATURE 269
STORIES AND POEMS 269
Quotations from Froebel, Arnold and Hinsdale 269
Quotation from Whittier 270
A Cradle Song 270
Idyls of the King 271
Extract from The Coming of Arthur 271
Extract from Guinevere 271
Extract from The Holy Grail 272
Extract from The Holy Grail 273

PAGE

STORIES AND POEMS—Continued.
From Sir Galahad and The Holy Grail..... 274
Knighthood 276
Break, Break, Break..... 277
A Farewell 278
Bugle Song 278
Extract from The Vision of Sir Launfal..... 279
How Little Cedric Became a Knight..... 281
Abou Ben Adhem..... 287
The Builders 288
The Ladder of Saint Augustine..... 290
The Heritage 291
A Child's Dream of a Star..... 293
The Daffodils 296
The Solitary Reaper..... 297
Study of Poem..... 298
Drifting 298
Christ and the Little Ones..... 301
Study of Poem..... 303
To a Skylark..... 303
The Skylark 304
The Return of Columbus..... 305
Columbus 308
Study of Poem..... 309
The Legend Beautiful..... 309
The Pied Piper of Hamelin..... 312
Our Flag 318
The American Flag..... 318
Story of the Star Spangled Banner..... 319
The Star Spangled Banner..... 319
Salute To Our Flag..... 320
The Blue and the Gray..... 321
Battle Hymn of the Republic..... 322

CHAPTER VI

PICTURE STUDY 324
Quotation from Anna Bracket..... 325
Pictures for the First Four Grades
Grade I 326
Grade II 326
Grade III 327
Grade IV 327
World Pictures 328
Study The Sower..... 329
Study The Angelus..... 330
The Angelus, by Lord Houghton..... 330
The Angelus, by Mrs. Burke..... 331
Quotations from Wm. F. Harris and E. C. Hewett.... 332

INDEX

STORIES AND POEMS

	PAGE
Abou Ben Adhem—Leigh Hunt	287
Almost Time	172
American Flag, The—Drake	318
And You Sweet Rose—Lockhart	237
Angelus, The—Lord Houghton	330
Apple-Seed John—Child	253
Apple Tree, The	247
April Welcome, An—Phoebe Cary	249
Apostrophe to the Ocean—Byron	154
Autumn Leaves	90
Aspen Tree, The	84
An Eastern Legend	166
Barefoot Boy—Whittier	17
Beautiful Bells of the World	331
Bees	259
Birds—Edwin Arnold	207
Birds Cannot Count—Popular Educator	210
Birdies in the Greenwood (Song)	209
Birdling's Good-Night to the Flowers—(Song)	102
Bird Game—Beebe	216
Birds in Summer—Howitt	94
Birds of Killingworth—Longfellow	164
Bloodroot, The	230
Bluebird, The—Hopkins	209
Blue and the Gray, The—Finch	321
Bluebell, The	27
Bluebird, The—Ebon Rexford	207
Blue Jay, The—Sweet (Dana Estes and Co.)	167
Blue Gentian, The	71
Blue Violet, The—Cary	230
Book of Nature, The—Phoebe Cary	20
Before the Leaves Fall—Sangster	86
Break, Break, Break—Tennyson	277
Bring Flowers—Hemans	49
Brook, The—Tennyson	152
Bugle Song	278
Building of the Nest—Sangster	213
Butterfly, The—Sigourney	61
Butterfly, The—Wordsworth	58
Battle Hymn of the Republic, The—Julia Ward Howe	322

PAGE
Builders, The 288
Cat and the Monkey, The..... 139
Chambered Nautilus, The..... 221
Children, The 332
Chickadee 165
Child's Thought of God, A—Browning..... 87
Christmas—Proctor 124
Christmas—Amedeus 124
Christmas Tree, A—Dickens..... 126
Christmas Eve 130
Christmas Bells, The..... 131
Child's Dream of a Star, A—Dickens..... 293
Christopher, Saint—Jackson 134
Chorus of the Flowers—Wheelock..... 231
Cloud, The—Shelley 143
Clouds 144
Columbus—Miller 308
Come Let Us Plant the Apple Tree—Bryant..... 250
Cradle Song, A—Father Tabb..... 270
Cradle Song, A—Tennyson 216
Christ and the Little Ones—Gill..... 301
Correggio's Holy Night..... 127
Daffodils, The—Wordsworth 296
Dandelion, The, To—Lowell..... 245
Dandelion, The 241
Dove and the Woodpecker, The..... 101
Drifting—Read 298
Each and All—Emerson..... 44
Easter—Jordan 194
Easter—Gaynor 196
Eastern Legend, An—Goodwin..... 166
Empty Nest, The—Miller..... 205
Extract from Gibson..... 61
Extract from Milton..... 33
Extract from Wordsworth..... 32
Extract from the Vision of Sir Launfal..... 145
Extract from the Vision of Sir Launfal..... 279
Fable 99
Farewell, A—Tennyson 278
Farmer and His Son, The..... 110
Feast of Mondamin, The..... 110
Ferns 238
Ferry for Shadowtown, The..... 156
Fishes 265
Flaxseed, The—Hopkins 183
Flowers—Longfellow 72
Flower-de-Luce—Longfellow 203
Forest Hymn, A—Bryant 40
Forest Song—Venables 74

	PAGE
Forest Song—Allen	74
Forget-Me-Not	47
Frog, The	222
Glory of God in Creation, The	38
Grasses, The	239
Grave in the Forest, The	82
Hare and the Tortoise, The	265
Hiawatha's School—Longfellow	136
Honey Bees	256
How the Leaves Came Down—Coolidge	87
How Little Cedric Became a Knight—Harrison	281
Holy Night	127
Humming-Bird, The	206
Humming-Birds in the Amazon	96
Heritage, The—Lowell	291
I Listen to the Voice of God—(Donahoe's Magazine)	174
In April—Rexford	208
Indian Cradle Song	138
Iris	202
Idyls of the King—Tennyson	271
Jack-in-the-Pulpit—Browning	232
Jack-in-the-Pulpit—Whittier's Child Life	233
Jewish Legend, A—Phelps	133
King Solomon and the Bees	259
Kitten Playing with Leaves	140
Knighthood	276
Landing of the Pilgrims	112
Last Dream of the Old Oak, The	79
Laughing Chorus, The	176
Legend of the Gentian	71
Legend of the Great Dipper	160
Legend of the Chrysanthemums or Christ Flowers	246
Legend of Saint Christopher	134
Lily of the Resurrection, The	194
Line of Golden Light, The	28
Little Artist, The	145
Little Brown Seed in the Furrow, The	177
Little Doves, The	101
Little Morning-Glory Seed, A	55
Little Town of Bethlehem—Philips Brooks (E. P. Dutton)	128
Little Bird	97
Little Plant, A	65
Ladder of Saint Augustine, The	290
Little Poet, A	62
Legend Beautiful, The	309
Maize for the Nation's Emblem—Thaxter	111
Milkweed Babies	66
Milkweed Case	63
Morning-Glory, The	53

PAGE
Moss Rose, The 47
Mother Truth's Melodies 78
Nature's Easter Music—Larcom 197
Nature's Miracles—Cowper 39
New Moon, The—Follen 159
November—Alice Cary 116
November—Jackson 117
November—Cary 117
Oak, The 83
October—Jackson 90
October's Party 88
Ode To A Waterfowl—Bryant 103
Orpheus, A Myth of the South Wind—Judd (Rand, McNally) 227
Our Pasque Flower—Arnold 192
O Painter of the Fruits and Flowers 252
Pansy, The 48
Painter, The 91
Pea Blossom, The—Anderson 181
Poplar Tree, The 84
Poppy Seed, A—Thaxter 69
Primrose of the Rock, The—Wordsworth 45
Pussy Willow 189
Poems in Nature—Thompson, Maurice 37
Pied Piper of Hamelin, The—Browning 312
Rabbits 260
Rainbow, The—O'Hagan 26
Rainbow, The—Cooley 26
Rainbow, The 32
Rainbow Queen, The 202
Robin's Return—Thomas 214
Return of Columbus, The—Irving 305
Rose, The 235
Sandpiper, The—Celia Thaxter 105
Seven Times One—Ingelow 68
Sheep and the Cow, The 267
Snail, The—Cowper 188
Snail, The—Lamb 213
Snail, The—Tennyson 220
Snails, Pond—Wordsworth 220
Snowflakes—Jarvis 147
Snow Song, A—Cooper 148
Song of Creation—Addison 38
Song of the Sea—Cornwall 151
Song of the Grass Blades 239
Skylark, To A—Shelley 303
Skylark, The—Hogg 304
Sparrows, The—Thaxter 168
Spring Has Come—Holmes 77
Squirrel, The—Howitt 108

Forest Song—Allen
Forget-Me-Not
Frog, The
Glory of God in Creation, The
Grasses, The
Grave in the Forest, The
Hare and the Tortoise, The
Hiawatha's School—Longfellow
Honey Bees
How the Leaves Came Down—Coolidge
How Little Cedric Became a Knight—Harrison
Holy Night
Humming-Bird, The
Humming-Birds in the Amazon
Heritage, The—Lowell
I Listen to the Voice of God—(Donahoe's Magazine)
In April—Rexford
Indian Cradle Song
Iris
Idyls of the King—Tennyson
Jack-in-the-Pulpit—Browning
Jack-in-the-Pulpit—Whittier's Child Life
Jewish Legend, A—Phelps
King Solomon and the Bees
Kitten Playing with Leaves
Knighthood
Landing of the Pilgrims
Last Dream of the Old Oak, The
Laughing Chorus, The
Legend of the Gentian
Legend of the Great Dipper
Legend of the Chrysanthemums or Christ Flowers
Legend of Saint Christopher
Lily of the Resurrection, The
Line of Golden Light, The
Little Artist, The
Little Brown Seed in the Furrow, The
Little Doves, The
Little Morning-Glory Seed, A
Little Town of Bethlehem—Philips Brooks (E. P. Du
Little Bird
Little Plant, A
Ladder of Saint Augustine, The
Little Poet, A
Legend Beautiful, The
Maize for the Nation's Emblem—Thaxter
Milkweed Babies
Milkweed Case
Morning-Glory, The

Moss Rose, The [illegible]
Mother Truth's [illegible]
Nature's Easter [illegible]
Nature's Miracle [illegible]
New Moon, The [illegible]
November—Alice [illegible]
November—Jackson [illegible]
November—Cary [illegible]
Oak, The [illegible]
October—Jackson [illegible]
October's Party [illegible]
Ode To A [illegible]
Orpheus, A Myth [illegible]
Our Pasque Flower [illegible]
Painter of the Frost [illegible]
Pansy, The [illegible]
Painter, The [illegible]
Pea Blossom, The [illegible]
Poplar Tree, The [illegible]
Poppy Seed, A [illegible]
Primrose of the [illegible]
Pussy Willow [illegible]
Poems by [illegible]
[illegible]
[illegible], The [illegible]
[illegible], The [illegible]
Rainbow, The [illegible]
Rainbow, The [illegible]
Robin's Return [illegible]
Robin [illegible] of [illegible]
Sa[illegible], The [illegible]
Sandpiper, The [illegible]
Sh[illegible]
Sn[illegible]
Sn[illegible]
Sn[illegible]
Sno[illegible]
Sno[illegible]
Song [illegible]
Song [illegible]
Song [illegible]
Sky[illegible]
Sky[illegible]
Sparr[illegible]
Spring [illegible]
Squirr[illegible]

PAGE
Strange Child's Christmas 129
Sun, The—Emerson 155
Sunbeam, The—Hemans 156
Sun's Farewell, The—Stevenson 156
Sweet Warblers 204
Sweet and Low—Tennyson 226
Sleep, Baby, Sleep 268
Stars, The—Cornwall 159
Solitary Reaper, The 297
Star Spangled Banner, The—Key 319
Story of the Star Spangled Banner 319
Salute To Our Flag 320
Sower, The 329
Talking in Their Sleep—Thomas 248
Thanksgiving, A—Larcom 114
Thanksgiving Day—Child 112
Thanksgiving Hymn—Montgomery 114
Three Kings, The—F. W. Faber 125
Tree Legends 82
Tree Planting 254
Under the Willows—Lowell 238
Use of Flowers, The—Hewett 48
Voice of Spring, The—Hemans 174
Waiting to Grow 177
Water-Bloom, The—Celia Thaxter 30
We are Red Birds—(Song) 215
Wild Rabbits 265
Wind, The—Stevenson 225
Wind Anemone, The—O'Sheridan 229
Wind Princess, The—Bixby 66
Winter and Spring—Brooks 171
Wynken, Blynken and Nod—Field 163

SUMMER PLEASURES—*By Plockhurst*

NATURE STUDY AND LITERATURE

CHAPTER I

INTRODUCTORY DISCUSSION

Nature is one of the child's first teachers.

"Hand in hand with her he walks,
Face to face with her he talks,
Part and parcel of her joy."

He says with Lowell:

"For the whole year long, I see
All the wonders of faithful nature
Still worked for the love of me."

When he enters school he is

* * * rich in flowers and trees,
Humming-birds and honey-bees."

He knows,

"How the robin feeds her young,
How the oriole's nest is hung,
Where the whitest lilies blow,
Where the freshest berries grow,
Where the ground-nut trails its vine,
Where the wood-grapes clusters shine;
Of the black wasp's cunning way,
Mason of his walls of clay,
And the architectural plans
Of gray hornet artisans."

—*Whittier's "Barefoot Boy."*

Nature is a skillful teacher and her books contain wonderful pictures. Memories of the happy days spent wandering in the woods and fields, discovering the secrets of birds and bees, cannot fail to stimulate a strong desire in the child's heart to broaden his horizon and increase his knowledge.

Jackman writes: "The child comes to the teacher with his eyes filled with a thousand pictures, but these are ignored and he is robbed of them one by one, until the beauty of this world fades from his sight, and it is changed to a vale of tears."

Childhood is, certainly, the most fruitful period for the culture of the emotions, the period best adapted to build up the positive side of character, and no one should question the desirability of fostering a love for those things which will tend to elevate, refine, and ennoble the child's higher life and bring him into harmony with the Designer and Author of nature, before he becomes absorbed in unworthy pursuits.

There was a Country Club on Storm King Mountain above the Hudson river, where they used to celebrate a festival of flowers every spring. Some of the seekers may have had a few gray hairs; but for that day at least they were all boys and girls. Nature was as young as ever and they were all her children. * * The hidden blossoms of friendship unfolded; laughter and merry shouts and sketches of half forgotten songs rose to the lips; school was out and nobody listened for the bell. *From Fisherman's Luck, Copyright, Chas. Scribner's Sons.*—HENRY VAN DYKE.

Nature has furnished inspiration for many of the most illustrious writers and painters of the world and the sympathetic insight which enabled them to reveal the beauty and the grandeur of God's handiwork, could be acquired only by the most loving investigation.

Wordsworth, Bryant, Lowell and a host of other nature-lovers who held "communion with her visible forms," suggest many messages beautifully adapted to the culture of the imagination and the child should be led to realize that he is

but "thinking God's thoughts after Him" when he discovers the beauty or the utility of one of nature's treasures, whether it be a giant oak decked in royal splendor or a lovely butterfly flitting from flower to flower. Contact with nature supplemented by art in the form of choice literature and beautiful pictures cannot fail to minister to the child's spiritual life and thus prove invaluable in the formation of good character.

In genuine nature study, personal investigation is an essential element and from every point of view must be recognized as the most effective means of stimulating thought. The establishing of a truly sympathetic appreciation of nature will prove most valuable to the child in furnishing a sure foundation for future acquirements in scientific knowledge. Through nature study properly presented, the power of expression has wonderful opportunity for development; the child's eyes are opened to see something of the wonders and beauties around him, his sympathies are enlarged and he is enabled to appreciate better the literature inspired by nature.

The sketching, modeling and painting of natural forms sharpens the power of observation, and oral and written expression follows as a natural result. Nature study gives the child something definite to discover, something interesting to draw, paint, and describe, and this concrete instruction, this habit of exact and truthful expression, based on observation, will furnish a basis for correct reasoning and thus serve as a means of developing power and self-reliance.

"The value of drawing as an educational agency is simply incalculable. It is the first step in manual training. It brings the eye and the mind into relations of the closest intimacy, and makes the hand the organ of both. It trains and develops the sense of form and proportion, renders the eye accurate in observation and the hand cunning in execution."—*From Mind and Hand, by Chas. H. Ham.*

The value of the work, however, should not be measured by the acquisition of knowledge or the power to express it, but rather by the love and the sympathetic interest awakened in nature and the profound reverence for the design and the protecting care revealed in the works of earth and sky by an all-wise Creator.

If this is not the leading purpose in nature work, the child has been deprived of the most beautiful and important lesson nature is capable of teaching.

THE BOOK OF NATURE

We scarce could doubt our Father's power,
  Though His greatness were untold
In the sacred record made for us
  By the prophet-bards of old.
We must have felt His watchfulness
  About us everywhere;
Though we had not learned, in the Holy Word,
  How He keeps us in His care.

I almost think we should know His love,
  And dream of His pardoning grace,
If we never had read how the Savior came,
  To die for a sinful race.
For the sweetest parables of truth
  In our daily pathway lie,
And we read, without interpreter,
  The writing on the sky.

The ravens, fed when they clamor, teach
  The human heart to trust;
And the rain of goodness speaks, as it falls
  On the unjust and the just.
The sunshine drops, like a leaf of gold,
  From the book of light above;
And the lily's missal is written full
  Of the words of a Father's love.

So, when we turn from the sacred page
Where the holy record lies,
And its gracious plans and promises
Are hidden from our eyes;
One open volume still is ours,
To read and understand;
And its living characters are writ
By our Father's loving hand!

—PHOEBE CARY.

TEACHER'S PREPARATION

It is undoubtedly true that lack of preparation on the teacher's part is the most serious drawback in the nature study problem. Many teachers have given the subject no special attention and the ordinary text books in natural science are not well adapted to give the preparation demanded for practical work.

The teacher who hopes to guide her pupils wisely will find it advisable to go directly to nature for inspiration; she must learn to know and to love the birds, the flowers, and the trees, if she hopes to lead her pupils to know and to love them; she must learn to observe in order to direct and test the observation of her pupils. After having studied, sketched, and written descriptions of a few typical plants and animals and verified the descriptions by reference to good text books, a teacher will begin to realize something of the enjoyment in store for her pupils.

The writings of Wordsworth, Burroughs, Bryant, Gibson, Van Dyke, Thompson, Seton, and other nature lovers will give the inspiration and enthusiasm needed to guide teachers and pupils in discovering the beauty and the utility of common things.

The Creator has provided an abundance of choice material

ful a means of attaining success as the co-operation of her patrons, and will not fail to consider carefully, in the beginning work at least, the subjects which will be most likely to meet with favor in her locality.

A living interest on the teacher's part will soon induce enthusiasm in the pupils, and when parents realize that the children are interested and are doing better work in geography, language, and other subjects, because of their interest, the teacher will be permitted to exercise her judgment in the selection of material without having her motives questioned, even though she might dare to claim a share of attention for subjects especially adapted to cultivate the higher aims of nature study.

Continue nature study, then, after the child enters school. Select types which can be studied in their own natural environment, and make every aim subordinate to the controlling motive in education—character growth.

SUMMARY OF AIMS

To develop the child's higher nature, spiritual, æsthetic, and ethical.

To increase his happiness by making him better acquainted with his physical environment.

To prepare him to appreciate the literature that nature has inspired.

To develop a sympathetic interest in living things.

To develop the intellectual powers.

To lead the child to love nature and the Author of nature.

COLOR IN NATURE

Color has great attraction for children and should play an important part in the nature work. Little children respond

to beauty as readily as they do to kindness, and the golden glory of autumn appeals to them in a special manner.

The trees are beautiful and wonderful at any and all seasons of the year, but in autumn their gorgeous colors cannot fail to open the eyes of the least observant to the loveliness of the season. Wordsworth says:

"The world is too much with us; late and soon,
Getting and spending, we lay waste our powers;
Little we see in nature that is ours."

The teacher who is in perfect accord with the harmony of color and form displayed so lavishly in the bright flowers, ripened leaves and fruits will find ways and means of imbuing the child's spirit with the influence exerted by this season, so rich in choice color material.

A series of lessons on color will prove exceedingly valuable in enabling children to recognize and appreciate the harmony and gradation of the different colors ranging from the somber tones of grays and browns in the trunks of trees to the brilliant hues seen in the sumach and maple leaves.

Some day, at the beginning of the term, when the schoolroom is flooded with light, hang prisms in a sunny window and let the children enjoy the beautiful bars of color thrown in the room.

Ruskin says:

"Nature has a thousand ways and means of rising above herself, but incomparably the noblest manifestations of her capability of color are in the sunsets among the high clouds.

"The whole sky, from the zenith to the horizon, becomes one molten, mantling sea of color and fire; every black bar turns into massy gold, every ripple and wave into unsullied, shadowless crimson, and purple, and scarlet, and colors for which there are no words in language and no ideas in the mind."

The spectrum colors are found everywhere in earth and sky, and children delight in painting and grouping them. The

elms, golden-rod, dandelion and many other trees and flowers give the tones of yellow, and the maples many hues of red, orange and green. The oaks give purple, reddish brown and a variety of deep rich broken colors.

A spectrum and scales of color, should be made on gray mounting board for the purpose of developing color perception. A mixture of water color paints can be used to advantage in showing tints, shades and intermediate colors, and the color tablets in matching colors in the spectrum and scales of colors.

Direct attention to color in nature and in decorations.

Encourage children to invent pleasing combinations.

Lay scales of colors—violet, blue, green, yellow, orange and red, using two tints and two shades of each.

Let the children blow soap-bubbles, find spectrum colors in fruits and flowers, and make a collection of grasses, ripened leaves, and seed pods.

Decorate the school-room with flags, leaves, flowers and pictures of birds, for an October Color Day.

The enjoyment of outdoor life will be greatly increased when the children are capable of discovering and appreciating harmonious combinations.

Color songs, poems and games should be emphasized.

THE RAINBOW

"The sun went out to shine one day,
Said he, "I'll drive the rain away;"
The raindrops laughed to see him try
To drive them back into the sky.
Each raindrop caught a sunbeam
And split it into rays of light,—
Red, yellow, blue, three rays in one,
And made a rainbow just for fun."

(*Cooley's Language Book.*)

THE RAINBOW

Eternal seal of peace from God,
With heavenly colors bright,
Spanning this earth with rays of love
Wrought in divinest light;
Arch of the hours, the days, the years,
Since our new faith began,
Symbol of Faith, Hope, and Love
A threefold gift to man.

—THOMAS O'HAGAN.

THE BLUEBELL

There is a story I have heard—
A poet learned it from a bird,
And kept its music, every word.
A story of a dim ravine,
O'er which the towering tree tops lean,
With one blue rift of sky between;

And there two thousand years ago,
A little flower, as white as snow,
Swayed in the silence to and fro.
Day after day, with longing eye,
The flower watched the narrow sky,
And fleecy clouds that floated by.

And through the darkness, night by night,
One gleaming star would climb the height
And cheer the lonely floweret's sight.
Thus watching the blue heavens afar,
And the rising of its favorite star,
A slow change came,—but not to mar;

For softly o'er its petals white,
There crept a blueness, like the light
Of skies upon a summer night;
And in its chalice, I am told
The bonny bell was formed to hold,
A tiny star that gleamed like gold.

Now, little people, sweet and true,
I find a lesson here for you,
Writ in the floweret's bell of blue.
The patient child whose watchful eye
Strives after all things pure and high,
Shall take their image by and by.

FOR DISCUSSION AND REPRODUCTION

THE LINE OF GOLDEN LIGHT

Once upon a time there lived a child whose name was Avilla. She was sweet and loving and fair to look upon. Her little sister, whom she dearly loved, could not see God's beautiful world, nor enjoy His bright sunshine. Avilla heard of a wise old woman who lived in a cave many miles away. People said this woman knew a secret, by means of which the blind could receive their sight, so Avilla went to the cave. The happy thoughts in her heart made the time pass quickly and the soft, cool breeze seemed to be whispering a song to her all the way.

When she reached the dark cave the thought of her little blind sister gave her courage to enter it.

In a dark corner sat the queer old woman on a stone chair, spinning flax into fine thread.

Avilla said, "I have a little blind sister, can you tell me how to open her eyes?" "Yes," said the wise old woman, "I can tell you, but you will not do it. People who can see, trouble themselves very little about those who are blind!" "I will do anything to help my dear sister," said Avilla. "Oh, please tell me." The old woman looked earnestly at her and then stooped down and picked up a very long thread. She handed it to Avilla, saying: "Take this, carry it all around the world, and when you return, come to me and I will show you, how your blind sister may be cured." Avilla thanked her and started on her journey, trailing the long thread after her. * * * * Her heart was full of joy as she thought of her little sister. She looked back to be sure the thread had not broken. Imagine her surprise to see that instead of a gray thread of spun flax it was a thread of golden light that glittered and shone in the sunlight. She reached the forest. Her heart almost stopped beating. "I can never go through that gloomy forest," she said. A soft breeze seemed to whisper "Look at the thread, look at the golden thread." She looked back and, strange to say, each tiny blade of grass, which the thread had touched, had blossomed into a flower. "How beautiful!" she exclaimed, as she looked at the flowery path.

She hurried forward into the dark woods and after a tiresome journey she reached the glad sunshine again. A new difficulty faced her. As far as she could see stretched a low, swampy marsh. The thought of her little sister encouraged her and she bravely plunged on through the mire with the golden thread trailing after her.

She looked back and wherever the mysterious and beautiful thread had touched the earth, the water and mud had dried up. She said to herself, "this will help others to cross," and the thought made her sing for joy.

After a time her singing ceased. She reached a dreary desert. She toiled on, cheered by a swarm of yellow butterflies that fluttered just ahead of her. At last, the end of the desert was reached, just as the sun disappeared behind a crimson cloud. What did Avilla see when she looked at the golden thread, which had trailed behind her all day on the hot sand? Tall shade trees had sprung up along the path, and each grain of sand that the thread had touched was now changed into a diamond, or ruby, or emerald, or some other precious stone. It was a lovely sight to behold, the beautiful trees and the sparkling gems. Avilla thought she heard the birds singing their evening songs. One by one the bright stars came out in the quiet sky as if to keep guard while she slept.

The next morning she started again on her long journey round the world. After a time she reached a great mountain. It seemed to say, "How dare you attempt to climb to my summit?" Just then two strong eagles with outspread wings rose from their nests on the side of a steep cliff near by and soared majestically and slowly aloft. "Be brave and strong and you shall meet us at the mountain top," they seemed to say. She climbed on, keeping the soaring eagles always in sight. As she neared the top she looked back and saw that the sharp, broken rocks had changed into broad and beautiful white marble steps. She rejoiced to see the beautiful pathway she had made for others.

Avilla reached the cave, ran forward to the wise old woman and cried out: "I have done all you told me to do! will my little sister see?" The woman seized the golden thread and exclaimed, "At last! at last! I am freed!" In an instant she resembled a beautiful princess, with long golden hair and tender blue eyes, her face radiant with joy, and this is the story she told Avilla: "I was a king's daughter, but I was so selfish and idle that I never thought of the happiness of others. I was compelled to live in this cave, until I could find some one

who would be generous and brave enough to take the long dangerous journey around the world for the sake of others. I have looked and looked a long time. Now I can be happy again. Your line of light—love—has brought joy and happiness to my life and now we will go to your little blind sister and open her eyes. Emphasize "Love," the Light of the World." *Abridged. Told by Elizabeth Harrison in Story Land.*

STUDY OF POEM

THE WATER-BLOOM

A child looked up in the summer sky
Where a soft, bright shower had just passed by;
Eastward the dusk rain-curtain hung,
And swiftly across it the rainbow sprung.

"Papa! Papa! what is it?" she cried,
As she gazed, with her blue eyes opened wide,
At the wonderful arch that bridged the heaven,
Vividly glowing with colors seven.

"Why, that is the rainbow, darling child;"
And the father down on his baby smiled.
"What makes it, papa?" "The sun, my dear,
That shines on the water-drops so clear."

Here was a beautiful mystery!
No more questions to ask had she,
But she thought the garden's loveliest flowers
Had floated upward and caught in the showers.

Rose, violet, orange, marigold—
In a ribbon of light on the clouds unrolled!
Red of poppy, and green leaves, too,
Sunflower yellow, and larkspur blue.

A great, wide, wondrous, splendid wreath
It seemed to the little girl beneath;
How did it grow so fast up there,
And suddenly blossom, high in the air?

She could not take her eyes from the sight;
"Oh, look!" she cried in her deep delight,
As she watched the glory spanning the gloom,
"Oh, look at the beautiful water-bloom!"

—CELIA THAXTER.

Preparation.—Hang a prism in the sunlight and make a "prism rainbow."

Review "The Rainbow."

Children tell what the sun said. Tell what the raindrops did.

Tell story of a water-drop.

What do we call the water-drops that fall from the clouds?

Presentation.—Teacher, read and re-read "The Water-Bloom."

Children image, and describe pictures suggested by the poem.

Help children to see the child, the man, the sky, and the wonderful arch. Request children to watch the sky from day to day and when a "dusk rain-curtain" appears, observe it very carefully.—How was it formed? What will become of it? Then what may we see? Do you see the expression on the child's face? Find the rainbow colors in flowers. Repeat the conversation between child and father. What change came over the child after her father answered her question? Tell what she thought about the rainbow. Recall the little Hiawatha's question. What did Nokomis answer? Children repeat, " 'Tis the heaven of flowers you see there," etc. What is meant by beautiful mystery? Can you suggest other mysteries? Repeat Tennyson's lines for children, "Flower in the

crannied wall," etc. Do you think the little girl's father was glad to see the rainbow?

No doubt he thought of what a great man named Wordsworth, said—

"My heart leaps up when
I behold a rainbow in the sky,
So was it when I was a child,
So is it now I am a man;
So shall it be when I grow old."

Do you wonder at the *child's* surprise and delight?

How many colors in the rainbow? How are they arranged? What flowers would give the red? the blue? the yellow?

Let children make a flower rainbow and memorize the poem.

RELATION OF NATURE STUDY TO LITERATURE

Literature should be regarded as an important contributor to the study of nature. The permanent, inspiring truth, the creative fancy, and the forcible expression of classic literature, have power to impress the child with true ideals of beauty and to cultivate a love for choice literature that will influence his future life.

Burroughs says, "Unless science is mixed with emotion and appeals to the heart and imagination, it is like dead, inorganic matter; and when it is so mixed and transformed, it is literature." This power to beautify and transform the most commonplace objects and cause the susceptible nature of the child to respond to this inspiring influence, is possessed by literary artists.

Messages fraught with untold beauty are written in large type on every page of nature's book, for him whose soul is capable of interpreting their meaning. Here are instances:

These are thy glorious works, Parent of good,
Almighty! Thine this universal frame,
Thus wondrous fair! Thyself how wondrous then,
Unspeakable! who sittest above these heavens,
To us invisible, or dimly seen

In these thy lowest works; yet these declare
Thy goodness beyond thought, and power divine.
Speak, ye who best can tell, ye sons of light,
Angels; for ye behold Him, and with songs
And choral symphonies, day without night,
Circle His throne rejoicing; ye in heaven.
On earth join, all ye creatures, to extol
Him first, Him last, Him midst, and without end.

—MILTON.

SILENT CATARACTS!

Who made you glorious as the gates of heaven
Beneath the keen full moon? Who bade the sun
Clothe you with rainbows? Who with living flowers
Of loveliest blue, spread garlands at your feet?—
God! Let the torrents, like a shout of nations,
Answer! and let the ice-plains echo "God."

* * *

Ye living flowers that skirt the eternal frost;

* *

Ye eagles, playmates of the mountain storm;
Ye lightnings, the dread arrows of the clouds;

* *

Utter forth God, and fill the hills with praise!

—SAMUEL T. COLERIDGE.

(From Hymn to Mount Blanc.)

The teacher who earnestly desires to lead children to see, to enjoy, and to love nature, must dwell with the poet and the artist as well as with the scientist; she must learn to appreciate something of the beauty they saw in forest and stream and the joy they felt in its portrayal.

The true poet's interpretation of the Creator's messages is

"Of such unstain'd, sublime, impassioned song
That angels, poising on some silver cloud,
Might listen mid the errands of the skies,
And linger all unblamed."

Rufus Choate attributes much of his power as an orator to the habit formed when a boy, of committing the most beautiful passages of everything he read. Poetry, which Wordsworth calls "the breath and

finer spirit of all knowledge," will help the child to see and to feel the beauty of his surroundings. When the teacher recognizes clearly the power of literature as a spiritualizing element in her own life, she will earnestly endeavor to bring the child under the influence of writers who will touch his heart, quicken his perception of beauty and give him great and beautiful thoughts as a permanent possession.

The thoughtful repetition of an ideal nature poem must enlarge the child's horizon and give him a deeper, fuller sense of the beauty of his surroundings, and for this reason the memorizing of poems should be considered an important part of the work in nature study.

The entire poem should be read by the teacher, then re-read and committed by the children after they have discussed it and made the thought their own.

Burroughs tells us that he was not conscious of any love for nature until his mind was brought in contact with literature.

BURROUGHS ON NATURE

* * * * What knowledge I possess of her creatures and ways has come to me through contemplation and enjoyment, rather than through deliberate study of her. I have been occupied more with the spirit than with the letter of her works. In our time, it seems to me, too much stress is laid upon the letter. We approach Nature in an exact, calculating, tabulating, mercantile spirit. We seek to make an inventory of her store-house. Our relations with her take on the air of business, not of love and friendship. The clerk of the fields and woods goes forth with his block of printed tablets upon which, and under various heads, he puts down what he sees, and I suppose foots it all up and gets at the exact sum of his knowledge when he gets back home. He is so intent upon the bare fact that he does not see the spirit or the meaning of the whole. He does not see the bird, he sees an ornithological specimen; he does not see the wild flower, he sees a new acquisition to his herbarium; in the bird's nest he sees only another prize for his collection. Of that sympathetic and emotional intercourse with nature which soothes and enriches the soul, he experiences little or none.

The knowledge of nature that comes easy, that comes through familiarity with her, as through fishing, hunting, nutting, walking, farming—that is the kind that reaches and affects the character and becomes a grown part of us. We absorb this as we absorb the air, and it gets into the blood. Fresh, vital knowledge is one thing; the dessiccated fact is another. Do we know the wild flower when we have analyzed it and pressed it or made a drawing of it? Of course this is one kind of knowledge and is suited to certain minds, but if we cannot supplement it with the other kind, the knowledge that comes through the heart and the emotions, we are poor indeed.

I recently read a lecture on "How a Naturalist is Trained," and I was forced to conclude that I was not and never could be a naturalist at all, that I knew nothing about nature. It seems, from this lecture, that the best naturalist is he who can cut a fish-egg up in the thinnest slices. * * * Are the great naturalists really trained in this way? I could but ask. * * * A large and open-eyed study of Nature and of natural forms, how much more fruitful it is than this minute dissection of germs and eggs! A naturalist is to be trained through his ordinary faculties of human observation, as Humboldt and Goethe were.

Not long since in a high school in one of our large cities, I saw a class of boys and girls studying Nature after this cold-blooded analytical fashion. They were fingering and dissecting some of the lower sea forms, and appeared to find it uninteresting business, as I am sure I should have done. If there was a country boy among them, I am sure the knowledge of Nature he had gathered on the farm was worth a hundred fold, for human purposes or the larger purposes of sciences, all this biological chaff. * * * The purely educational value of Nature Study is in its power to add to our capacity of education—our love and enjoyment of all open-air objects. In this way it adds to the resources of life, and arms a man against the *ennui* and vacuity that doth so easily beset us.

I recently had a letter from the principal of a New England high school, putting some questions to me touching these very matters: Do children love Nature? how shall we instill this love into them? how and when did I myself acquire my love for her? etc. In reply I said: "The child, in my opinion, does not consciously love nature; it is curious about things, about everything; its instincts lead it forth into the fields and woods; it browses around; it gathers flowers—they are pretty; it

stores up impressions. Boys go forth into Nature more as savages: they are predaceous, seeking whom they may devour; they gather roots, nuts, wild fruit, berries, eggs, etc. At least this was my case. I hunted, I fished, I browsed, I wandered with a vague longing in the woods, I trapped, I went cooning at night, I made ponds in the little streams, I boiled sap in the maple woods in spring, I went to sleep under the trees in summer, I caught birds in their nests, I watched for the little frogs in the marshes, etc. * * * I was not conscious of any love for Nature, as such, till my mind was brought in contact with literature. Then I discovered that I, too, loved Nature, and had a whole world of impressions stored up in my subconscious self upon which to draw. I found I knew about the birds, the animals, the seasons, the trees, the flowers, and that these things had become almost a grown part of me. I have been drawing upon the reservoir of youthful impressions ever since.

Anything like accurate or scientific knowledge of nature which I may possess is of later date; but my boyhood on the farm seems to have given me the feeling and to have put me in right relation with these things. Of course writing about these subjects also deepens one's love for them. If Nature is to be a resource in a man's life, one's relation to her must not be too exact and formal, but more that of a lover and friend."—*Permission of Mr. Burroughs.*

By all means then, give the child the rich heritage of literature with its messages of truth and beauty, which will help him to read the poems written by the Creator, "too grand for words or rhyme."

Prepare him to appreciate the inspirational literature of nature by leading him to watch closely and interpret sympathetically the life story of a few of nature's most beautiful types. Heine says: "Nature, like a great poet, knows how to produce the grandest effects with the fewest materials. You have only a sun, trees, flowers, water, and love. In sooth, should this last be absent from the heart of the beholder, the aspect is poor enough; for then the sun is only so and so many miles in diameter, and trees are good for fuel, and flowers classified scientifically, and water is wet."

The influence of ennobling sentiment is something to be felt rather than analyzed. Here are examples:

A CHILD'S THOUGHT OF GOD

They say that God lives very high;
But, if you look above the pines,
You cannot see our God, and why?

And if you dig down in the mines,
You never see Him in the gold;
Though from Him all that's glory shines.

God is so good He wears a fold
Of heaven and earth across His face,
Like secrets kept from love untold.

But still I feel that His embrace
Slides down by thrills through all things made—
Through sight and sound of every place.

* * *

—ELIZABETH BARRETT BROWNING.

POEMS IN NATURE

In the oldest wood I know a brooklet,
That bubbles over stones and roots,
And ripples out of hollow places,
Like music out of flutes.

There creeps the pungent breath of cedars,
Rich coolness wraps the air about
Whilst through clear pools electric flashes
Betray the watchful trout.

I know where wild things lurk and linger
In groves as gray and grand as time;
I know where God has written poems
Too strong for words or rhyme.

—MAURICE THOMPSON.

CHILDREN MEMORIZE:

SONG OF CREATION

The spacious firmament on high,
With all the blue, ethereal sky,
And spangled heavens, a shining frame,
Their great Original proclaim;
Th' unwearied sun, from day to day,
Does his Creator's power display,
And publishes to every land
The work of an Almighty hand.

Soon as the evening shades prevail
The moon takes up the wondrous tale
And nightly to the listening earth,
Repeats the story of her birth;
While all the stars that round her burn,
And all the planets in their turn,
Confirm the tidings as they roll,
And spread the truth from pole to pole.

What though no real voice or sound
Amid their radiant orbs be found?
In Reason's ear they all rejoice,
And utter forth a glorious voice,
Forever singing as they shine,
"The Hand that made us is divine!"

—ADDISON.

THE GLORY OF GOD IN CREATION

Thou art, O God, the life and light
  Of all this wondrous world we see;
Its glow by day, its smile by night,
  Are but reflections caught from thee.
Where'er we turn, thy glories shine,
And all things fair and bright are thine.

—THOMAS MOORE.

NATURE'S MIRACLES

What prodigies can Power Divine perform
More grand than it produces year by year,
And all in sight of inattentive man?
Familiar with th' effect, we slight the cause,
And in the constancy of nature's course,
And regular return of genial months,
And renovation of a faded world,
See naught to wonder at.

Should God again,
As once in Gabaon, interrupt the race
Of the undeviating and punctual sun,
How would the world admire! But speaks it less
An agency Divine, to make him know,
The moment when to sink, and when to rise,
Age after age, than to arrest his course?

All we behold is miracle: but, seen
So duly, all is miracle in vain.
Where now the vital energy that moved,
While summer was, the pure and subtle lymph
Through th' imperceptible, meandering veins
Of leaf and flower? It sleeps; and th' icy touch
Of unprolific winter has impressed
A cold stagnation on the intestine tide.
But, let the months go round, a few short months,
And all shall be restored. These naked shoots,
Barren as lances, among which the wind
Makes wintry music, sighing as it goes,
Shall put their graceful foliage on again,
And more aspiring, and with ampler spread,
Shall boast new charms, and more than they have lost.

The beauties of the wilderness are His,
That makes so gay the solitary place,
Where no eye sees them. And their fairer forms,
That cultivation glories in, are His.
He sets the bright procession on its way,
And marshals all the order of the year;

He marks the bounds, which winter may not pass,
And blunts its pointed fury: in its case,
Russet and rude, folds up the tender germ
Uninjured, with inimitable art;
And, ere one flowery season fades and dies,
Designs the blooming wonders of the next.

The Lord of all, Himself through all diffused,
Sustains, and is the life of all that lives.
Nature is but a name for an effect,
Whose cause is God. One spirit—His,
Who wore the platted thorns with bleeding brows—
Rules universal nature. Not a flower
But shows some touch, in freckles, streak or stain,
Of His unrivaled pencil. He inspires
Their balmy odors, and imparts their hues,
And bathes their eyes with nectar and includes,
In grains as countless as the seaside sands,
The forms with which he sprinkles all the earth.

Happy who walks with Him! whom what he finds
Of flavor or of scent in fruit or flower,
Or what he views of beautiful or grand
In nature, from the broad majestic oak
To the green blade that twinkles in the sun,
Prompts with remembrance of a present God.

—COWPER.

THE FOREST HYMN

The groves were God's first temples. Ere man learned
To hew the shaft, and lay the architrave,
And spread the roof above them—ere he framed
The lofty vault, to gather and roll back
The sound of anthems; in the darkling wood,
Amid the cool and silence, he knelt down,
And offered to the Mightiest solemn thanks
And supplication. For his simple heart
Might not resist the sacred influences
Which, from the stilly twilight of the place,
And from the gray old trunks, that high in heaven

Mingled their mossy boughs, and from the sound
Of the invisible breath that swayed at once
All their green tops, stole over him, and bowed
His spirit with the thought of boundless power
And inaccessible majesty. Ah, why
Should we, in the world's riper years, neglect
God's ancient sanctuaries, and adore
Only among the crowd, and under roofs
That our frail hands have raised? Let me, at least,
Here, in the shadow of this aged wood,
Offer one hymn—thrice happy, if it find
Acceptance in His ear.

Father, Thy hand
Hath reared these venerable columns. Thou
Didst weave this verdant roof. Thou didst look down
Upon the naked earth, and, forthwith rose
All these fair ranks of trees. They, in Thy sun,
Budded, and shook their green leaves in thy breeze,
And shot toward heaven. The century-living crow
Whose berth was in their tops, grew old and died
Among their branches, till, at last they stood
As now they stand, massy, and tall, and dark,
Fit shrine for humble worshipper to hold
Communion with his Maker.

These dim vaults,
These winding aisles, of human pomp or pride
Report not. No fantastic carvings show
The boasts of our vain race to change the form
Of thy fair works. But thou art here—thou fill'st
The solitude. Thou art in the soft winds
That run along the summit of these trees
In music; thou art in the cooler breath,
That from the inmost darkness of the place
Comes, scarcely felt; the barky trunks, the ground,
The fresh moist ground, are all instinct with thee.
Here is continual worship—Nature, here,
In the tranquility thou dost love,
Enjoys thy presence. Noiselessly, around,

From perch to perch, the solitary bird
Passes; and yon clear spring, that, midst its herbs,
Wells softly forth and wandering steeps the roots
Of half the mighty forest, tells no tale
Of all the good it does.

Thou hast not left
Thyself without a witness, in these shades,
Of thy perfection. Grandeur, strength, and grace
Are here to speak of thee. This mighty oak—
By whose immovable stem I stand and seem
Almost annihilated—not a prince,
In all that proud old world beyond the deep,
E'er wore his crown as loftily as he
Wears the green coronal of leaves with which
Thy hand has graced him. Nestled at his root
Is beauty, such as blooms not in the glare
Of the broad sun. Thou delicate forest flower,
With scented breath and look so like a smile,
Seems, as it issues from the shapeless mould,
An emanation of the indwelling Life,
A visible token of the upholding Love,
That are the soul of this wide universe.

My heart is awed within me when I think
Of the great miracle that still goes on,
In silence, round me—the perpetual work
Of thy creation, finished, yet renewed
Forever. Written on thy works I read
The lesson of thy own eternity.
Lo! All grow old and die—but see, again,
How on the faltering footsteps of decay
Youth presses—ever gay and beautiful youth
In all its beautiful forms. These lofty trees
Wave not less proudly that their ancestors
Moulder beneath them. * * *

There have been holy men who hid themselves
Deep in the woody wilderness, and gave
Their lives to thought and prayer, till they outlived
The generation born with them, nor seemed

Less aged than the hoary trees and rocks
Around them;—and there have been holy men
Who deemed it were not well to pass life thus.
But let me often to these solitudes
Retire, and in thy presence reassure
My feeble virtue. * * *

Be it ours to meditate
In these calm shades, thy milder majesty,
And to the beautiful order of thy works
Learn to conform the order of our lives.

—W. C. BRYANT.

CHAPTER II

FALL NATURE STUDY

PURPOSE OF THE WORK

To inspire and develop an inquiring, reverent spirit by leading the child to discover some of the secrets of the types studied.

To cultivate a sympathetic interest and a love for nature.

Outdoor lessons are necessary in order to enlist the child's sympathy and permit nature to speak to his soul as well as to his senses. Relation to environment, life, habits, function, beauty, protection, unity, and dependence should be emphasized in the lower grades.

The child's own experience should form the basis of what he acquires, and the more spontaneity and enjoyment there is in the nature study the more it will add to the resources of his life. Emerson's inspiring poem reveals the beauty of the perfect whole in nature and serves as a broad foundation for the study of types in their true home.

EACH AND ALL

* * *

All are needed by each one;
Nothing is fair or good alone.
I thought the sparrow's note from heaven,
Singing at dawn on the alder bough;
I brought him home, in his nest, at even;
He sings the song, but it cheers not now,
For I did not bring home the river or sky;—
He sang to my ear,—they sang to my eye,
The delicate shells lay on the shore;
The bubbles of the latest wave
Fresh pearls to their enamel gave,
And the bellowing of the savage sea
Greeted their safe escape to me,
I wiped away the weeds and foam
I fetched my seaborn treasure home;
But the poor unsightly, noisome things
Had left their beauty on the shore
With the sun and the sand and the wild uproar
* * * —RALPH WALDO EMERSON.

LESSONS ON PLANTS

From the first, children should be led to think of each plant as a working organism, closely related to its environment, and it should under no circumstances be studied as an isolated thing.

It is related to, and dependent upon soil, air, sunlight and rain. It supplies insects, birds and other animals with food. It furnishes clothing, food and shelter for man, and is a constant reminder of the Creator's power and goodness.

Bryant says:

"Thou hast not left
Thyself without a witness, in these shades,
Of thy perfection. Grandeur, strength and grace
Are here to speak of Thee."

"Not a flower
But shows some touch, in freckles,
Streak or stain,
Of His unrivaled pencil."

—COWPER.

"The Primrose of the Rock" read to the older children will help them to see unity and interdependence in nature.

Wordsworth calls the Primrose—

A lasting link in Nature's chain
From highest heaven let down.
The flowers, still faithful to the stems
Their fellowship renew;
The stems are faithful to the root,
That worketh out of view;
And to the rock the root adheres
In every fibre true.
Close clings to earth the living rock,
Though threatning still to fall;
The earth is constant to her sphere;
And God upholds them all. * * *

—WORDSWORTH.

FLOWERS

"Flowers are the thoughts of the spirit of God
Their love is love of his grace,
Their fragrance is breath of divinity,
Their beauty the light of his face."

Nature Study and Life.—HODGE.

Flowers are among the purest, loveliest things in nature and the teacher who develops a genuine abiding love of flowers in the heart of a child is instrumental in enriching his whole life by enabling him to treasure up a wealth of happiness for future years.

A teacher may begin this work by asking children: What flowers do you know? Tell about flowers you have seen growing in the woods, the garden, the park, the greenhouse. What flowers do you like best? Why? What flowers have you cared for? What flowers close on the approach of rain? Close at night? Where do water-lilies grow? Ferns? Cat's-tail? Wild roses? What plants sprout quickly in water? What plants grow from slips? Why does putting the ends of flower stems in water keep the leaves and blossoms fresh? What fruits are ripening this month? Name fruits cultivated near our homes. What fruits can be obtained at the grocery store? Find ten seed cradles. Name five important food plants. How many seeds in a cone? What yellow flowers may be seen now? What blue flowers? What seeds can you find on your way to school? What nuts? How many colors can you find in leaves? What trees do you know? What stories or poems do you know about flowers and trees?

Questions answered by individual observation, will help children to read some of the messages which the wayside flowers and trees have for them.

MEMORIZE:—

Hast thou named all the birds without a gun?
Loved the wood-rose and left it on its stalk?
* * *
O be my friend and teach me to be thine.

—EMERSON, *Forbearance.*

Outdoor observation with the class as a whole, and individ-

ual work out of school hours is absolutely necessary in order to secure the best results in this subject.

Choice poems and legends will strengthen the child's love for plant life and give him a deeper, fuller sense of their loveliness and symbolism.

THE FORGET-ME-NOT

When to the flowers so beautiful
The Father gave a name
Back came a little blue-eyed one,
All timidly it came,
And standing at its Father's feet,
And gazing in His face,
It said, in low and trembling tones,
And with a modest grace,
"Dear God, the name thou gavest me,
Alas! I have forgot."
The Father kindly looked him down
And said, "Forget-me-not."

THE MOSS ROSE

The angel of the flowers one day,
Beneath a rose-tree sleeping lay,—
That spirit to whose charge 'tis given
To bathe young buds in dews of heaven.
Awakening from his light repose,
The angel whispered to the rose:
"O fondest object of my care,
Still fairest found, where all are fair;
For the sweet shade thou giv'st to me
Ask what thou wilt, 'tis granted thee."
"Then," said the rose with deepened glow,
"On me another grace bestow."
The spirit paused, in silent thought,
What grace was there that flower had not?
'Twas but a moment,—o'er the rose
A veil of moss the angel throws,
And, robed in nature's simplest weed,
Could there a flower that rose exceed?

—*From the German Krummacher.*

THE PANSY

Once upon a time a flower of exquisite beauty and fragrance grew under a tall leaf in a lonely dell. One day an angel flying down to earth on a mission of love happened with her wing to brush aside the leaf and discover the flower.

"Ah!" cried the angel as she bent down to inhale its sweet fragrance; "You are far too lovely to live here in this forsaken spot. I will breathe upon you and give you an angel's face. You shall go forth and bloom in every land and carry with you sweet thoughts of love and heaven. From year to year you shall grow in beauty; and the richness and the splendor of your dress shall be a marvel and a joy to all who behold you." Then the angel kissed the flower and left the imprint of her beauty upon it. That is why the pansy has such a lovely face and has been called the flower that means loving thoughts.—*Adapted.*

FOR READING AND DISCUSSION

THE USE OF FLOWERS

God might have made the earth bring forth
  Enough for great and small,
The oak tree, and the cedar tree,
  Without a flower at all.
We might have had enough, enough,
  For every want of ours,
For luxury, medicine and toil,
  And yet have had no flowers.

Then wherefore, wherefore were they made
  All dyed with rainbow light,
All fashioned with supremest grace,
  Upspringing day and night—
Springing in valleys green and low,
  And on the mountains high,
And in the silent wilderness,
  Where no man passeth by?

Our outward life requires them not,
  Then wherefore had they birth?
To minister delight to man,
  To beautify the earth;
To whisper hope—to comfort man
  Whene'er his faith is dim;
For who so careth for the flowers
  Will care much more for Him!

—MARY HOWITT.

"Flower in the crannied wall
I pluck you out of the crannies;
Hold you here, root and all, in my hand,
Little flower—but if I could understand
What you are, root and all, and all in all,
I should know what God and man is."

TENNYSON.

Secretary James Wilson says: "Flowers should abound in the school grounds. They are among the best educators, for they develop taste and a love for the beautiful, and make men sensitive to the attractive and lovely, in town or country, in field or forest."

READ AND DISCUSS THIS POEM:

BRING FLOWERS

Bring flowers, pale flowers, o'er the bier to shed,
A crown for the brow of the early dead!
For this through its leaves hath the white rose burst,
For this in the woods was the violet nursed!
Though they smile in vain for what once was ours,
They are love's last gift. Bring ye flowers, pale flowers!
Bring flowers to the shrine where we kneel in prayer,—
They are nature's offering, their place is there!
They speak of hope to the fainting heart,
With a voice of promise they come and part,
They sleep in dust through the wintry hours,
They break forth in glory. Bring flowers, bright flowers!

—MRS. HEMANS.

If the teacher has awakened a deep interest in plant life by means of informal talks and outdoor lessons, some common flower may be chosen for special study.

The Life History of a Plant.—Tell children they may help to awaken the wonderful life hidden in the seeds they find in the garden. Let children plant seeds, morning-glory, poppy, and others, daily for a couple of weeks so that specimens in different stages of development will be ready when needed.

Spring is, of course, the best time of the year to plant seeds and study germination, but the needs of growing plants and the value of a seed should be emphasized at this time.

In the heart of a seed, buried deep, so deep,
A dear little plant lay fast asleep.
"Wake," said the sunshine "and creep to the light."
"Wake," said the voice of the rain-drops bright.
The little plant heard and rose to see
What the wonderful outside world might be.
—SELECTED.

THE MORNING-GLORY

Aims.—1. To lead children to think of the unity of plant life.

2. To direct attention to the beauty and the perfection to be found in common plants.

3. To call special attention to the importance and the formation of seeds.

Preparatory Work.—Review "The Use of Flowers" and "The Water Bloom."

Give questions, to be answered by studying the plants out of doors. Why called morning-glory? How many colors do you find in the open flowers? When do they go to sleep and when wake up? Does the same flower open day after day? What insects visit the morning-glory? Review observations made on morning-glory in the window-box and lead children to recall the needs of growing plants—soil, heat, light, and moisture. Talk about the habits of this flower.

Material.—Put several long sprays of morning-glories containing all the different parts of the plant in jars of water.

Plan of Work.—Compare the plant to a household. The Flower Household includes Flower mistress or queen, the stem servants, the leaf servants, and the root servants. Examine the morning-glory and see how the different members in this interesting household are dressed for their work. The mistress or queen in rainbow colors, the leaf and stem servants in green and the root servants in brown. Teacher, hang prism in a sunny window and let children match morning-glory and spectrum colors.

Incidentally name the parts of the flower—calyx, corolla, stamens, and pistil, while directing attention to its beauty. Note position and appearance of the buds. Decorate blackboard by sketching sprays of morning-glories.

The pupils have been watching the growth of the morning-glory in the window-box and are now ready to study the plant from the standpoint of function. Tell children they are to find out about the work of the plant and of each of its parts. Read selections that will bring the children into sympathy with the subject.

The flowers still faithful to the stems,
Their fellowship renew;
The stems are faithful to the root,
That worketh out of view.
—WORDSWORTH.

Work of the Root.—Lead children to see that the roots hold the other members of the family in place and aid in supporting the stem. Examine seedlings grown on cotton or moist blotting paper, to see the root-hairs. Oats and corn will show root-hairs without a microscope better than most plants.

Dig up carefully five or six growing plants, destroy the root-hairs on two or three and immerse roots of all the plants in a jar of water. Try several similar experiments and lead children to see that the plants will not live without the root-hairs.

Let children get the thought from the *plants.*

Cut off the stem of a vigorously growing plant and observe the drop of water forming on the cut end of stem. The water

came from the root, was absorbed from the soil through the root-hairs.

Work of the Stem.—By questioning, help children to see and tell that the stem holds up the leaves, buds and flowers to the sun and takes food from the roots to the leaves and the flowers.

Let a corner of a sheet of blotting paper touch the surface of colored water and watch the liquid creeping upward. Lamp-wick, twine, or a block of sugar will show this also.

Put stems of a plant with white flowers, as begonia, in a red liquid and notice the color of the petals a few hours later. Experiment with leaf of bleached celery also.

Measure the growth of the morning-glory in the window-box daily. Observe the stem twining around a support. Turn back and fasten a morning-glory stem and see what happens.

Work of the Leaves.—Remove leaves from a morning-glory vine to show that the stem with leaves is much prettier than the one without. Call attention to the fresh leaves; veins firm and strong, color bright green and outlines perfect.

Leaves Give Out Moisture.—Place a handful of fresh leaves on a table and cover with a glass dish. Place another jar without leaves near the first. Children discover that the glass over the fresh leaves contains moisture and the other glass does not. Try several similar experiments until children are convinced, that the leaves give out moisture. The moisture came from the leaves, the leaves obtained it from the stem, the stem from the root, and the root from the soil.

Observe petiole, shape of leaf, and the uses of the veins in spreading out the leaf blade.

Direct attention to the arrangement of the leaves on the stem, turning and spreading out to catch the sunlight.

The flower is the most beautiful part of the plant and should be approached most thoughtfully.

THE MORNING-GLORY

Up it sprang from the soft, dark earth
The morning-glory vine;
Higher and higher, brave and green,
With many a twist and twine,
Bird and butterfly wheeled to see,
And children stopped a-row,
To point with rosy fingers sweet,
And watch the blossoms grow.
Purple and crimson, white and blue,
Out from the lightsome green,
They swing and rustle, the dainty bells,
Their sheltering leaves between,
Low by the grass and high by the roof,
And beautiful all the way;
"And the prettiest flowers grow highest up,"
The children wisely say.

—SELECTED.

Flower.—The Mistress or Queen of the Household.

The corolla is the attractive part of this plant. Notice differences in color; corolla in one piece. Children, find dividing lines and compare with the number of parts in calyx. The corolla protects the most important part of the flower. Count the notches on the border and notice the lines that extend from each notch down to the end of the tube. Urge children to handle specimens carefully as something very precious. Teacher, open a flower and paste on card so that the inside of the flower may be examined.

Here we find five stamens fastened to the lower part of the blossom. One stamen attached to each part of the corolla. Take a good look at the stamens because they have very important work to do for the flower, they bear something that makes the seeds grow. Children, touch stamens and see the white pollen grains on their fingers.

Find the favorite number in this flower. Five stamens, five nectar tubes, five notches on the corolla, and five sepals.

Observe the morning-glory out of doors. Children, notice bees at work getting pollen from the stamens and nectar from the openings at the base of the flower. Call attention to the pistil in the center of the flower with the stigma at the top and the seed vessel at the bottom.

Examine the morning-glory vine and find a calyx without a blossom. Find pistil and calyx without corolla. Find seed-pods protected by calyx.

Children, examine a seed-pod containing soft, delicate ovules. How does the pollen reach the ovules? It falls on the little knob (stigma) at the top of the pistil. The bees are constantly flying from flower to flower, getting honey from one part of the flower and pollen from another part, and in doing this, they leave pollen grains on the stigma of the ripe pistil, the pollen passes down the tube to the seed-pod and the ovules begin to grow. The flowers soon fade so that the plant's energy may be devoted to the manufacture of seeds.

Open a ripe seed-pod and find three rooms in this little house and two seeds (three-sided seeds) in each room. If the vine is shaken, the seeds fall, when they are ripe. Children, find germinating seeds near the vines. Mark the growth by tying colored twine on the support each morning. Children, save seeds to plant next year.

Teacher, sketch morning-glory vine as directed by children, in order to lead them to observe carefully. Erase and let pupils sketch plant as a whole. Agassiz says, "A pencil is a good eye."

SUMMARY OF PLANT HOUSEHOLD

Includes how many members? Appearance of each? Interteresting habits? Work of the delicate root-hairs? stems? leaves? flowers?

Flower.—Emphasize beauty of color, beauty of form and beauty of use. Describe and picture calyx, corolla, stamen, and pistil. Work of each? How do the flowers help the bees? How do the bees help the flowers? Picture a morning-glory vine from memory. What is the mission of this flower? To beautify the earth and to make seeds. Tell the story we have been reading since we planted our morning-glory seeds. Lead children to think of the beauty wrapped up in the seed.

Compare the morning-glory with its relative, the bind weed (wild morning-glory) that is found twining over fences in the country. Our morning-glory is a member of a very distinguished family (Convolvulus) and has a number of beautiful and useful cousins, moonflower, cypress vine, sweet potato, and many others.

A LITTLE MORNING-GLORY SEED

One sunny day in May a little girl planted a morning-glory seed. It was a tiny seed with a hard brown coat.

This little girl put the seed in the ground and covered it with earth. Then she said: "Now, little seed, grow, grow, grow! Grow until you are a tall green vine. I want to see your pretty green leaves. I want to see your lovely trumpet flowers."

Little Mary went into the country to visit her grandma. John forgot the little seed, and it was left to take care of itself.

The ground where it lay was very dry. There had been no rain for a long time, so the wee seed could not grow at all.

It lay in the dry earth many days. It was very tired, and said to the ground: "O ground, please give me a few drops of water. Please

soften my coat. It is so hard and tight I cannot get my arms out. I shall never be a vine."

The ground answered, "I have not a drop of water to give you, little seed. You must ask the rain."

The little seed called to the rain: "O rain, I am a little morning-glory seed, deep down in the ground. I want to get out into the bright world, but I cannot. Won't you come down and wet the ground? My coat will then become soft. I shall be able to burst it open, and push out my two seed-leaves. Then I shall soon be a vine."

"I would like to help you," said the rain, "but I cannot, unless the clouds hang lower."

"O clouds," said the little seed, "please hang lower. Please let the rain come down. I need a few drops of water to soften my coat. I want to be a beautiful green vine. Won't you please help me?"

"The sun must hide first," said the clouds.

The little seed called to the sun, "O sun, please hide your bright face for a little while. Then the clouds can hang lower and the rain can come to me. My coat will be soft and I can push up into the world."

The sun loved the beautiful flowers. He loved the little seed, and he wanted to make it happy. He said, "Yes, I will hide."

Soon the clouds began to hang lower and lower. The warm raindrops began to fall faster and faster. The ground grew wetter and wetter. The little seed felt its coat grow softer and softer. Soon open it burst.

Out came some little rootlets and two bright green seed-leaves. Upward they pushed their way through the soft ground. At last, out they came into the warm air and bright sunshine.

How beautiful the world looked! How sweetly the birds sang! How happy the little flower was! It grew very fast. The warm rain and sun helped it. It became a tall, green vine, and sent out some little flower buds.

One morning the little buds opened, and out came the lovely trumpet flowers, to help make the world bright and happy.

When the little girl came back from her visit at grandma's, she ran to see if the morning-glory seed had begun to grow. How pleased and surprised she was when she saw the tall green vine and the pretty flowers.

"Can this be the little seed that I planted?" she said. "How fast it has grown!"

Just then she thought she heard a low, soft voice. It said: "Yes, little girl, I have grown. But I would still be the same tiny brown seed but for some kind friends. The soil, the sun, and the rain helped me to grow into this vine."—SELECTED.

TERMS USED IN DESCRIBING FLOWERS

Peduncle or flower stem.

Calyx: Outer whorl of green flower-leaves, (sometimes colored).

Corolla: Inner whorl of colored flower-leaves.

Perianth. The calyx and corolla taken together.

Sepals: Part of calyx. Petals: Part of corolla.

Stamens: Thread-like parts inside the corolla.

Pistil: The central part of the flower.

Filament: The stem of stamen.

Anther: The head of stamen. Pollen: Dust in anther.

Style: Stem of pistil. Stigma: Head of pistil.

Ovary: The base of pistil, holding seed.

Fruit; The ripened ovary with its adhesions.

THE BUTTERFLY

Aim.—To cultivate a sympathetic interest in living things. To give children an opportunity to observe the development of one of the most interesting types of animal life.

The graceful forms and beautiful colors of the many different kinds of butterflies are remarkably attractive and their life history is as fascinating as a fairy tale.

Preparation.—Informal talk with children about flowers and their insect friends.

Send pupils to the garden to get acquainted with their most attractive friends—the butterflies.

What flowers do they visit?

Compare their flight with the flight of birds and dragon-flies. In what position does the butterfly hold its wings when at rest? Observe one for several minutes some day and report observation. What do they get from the flowers?

Lead children to see the butterfly with the poet's eye. This is what one great poet says:

Oh! pleasant, pleasant, were the days,
The times when in our childish plays
My sister Emmeline and I
Together chased the Butterfly!
A very hunter did I rush
Upon the prey; with leaps and springs
I followed on from brake and bush;
But she, God love her! feared to brush
The dust from off its wings.—WORDSWORTH.

Emphasize beauty of color and form and make children desire to imitate Emmeline's example. Tell them, that the story this beautiful creature has to tell is very, very wonderful, and not too difficult for them to understand. Center the study of scale-winged insects about some particular kind that can be easily observed.

Cabbage Butterfly.—They are white with a few black lines or spots upon upper surface of wings and yellowish upon the under surface. They may be seen from early spring until late autumn. The different stages—eggs, larva, pupa and adult can be found in early fall and the entire transformation watched by children. To obtain the eggs, place an empty box with top and bottom removed, over a box containing a growing food plant (cabbage, nasturtium, or radish). Cover with mosquito netting. Teacher, capture a number of butterflies and put them in the box with cabbage, or other plant, where they will be likely to deposit eggs. If eggs are not secured let children find caterpillars and observe their habits for two or three days before formal study is begun.

Care of Caterpillars.—Keep some in a glass jar and some in a box, with sides removed, covered with netting. Supply the plants on which they were found feeding.

Habits.—Observe the caterpillar crawling on glass, also on

netting. Watch the movement of the jaws from side to side when eating. The little creature eats nearly all the time. He grows so rapidly that his skin becomes too tight for him and he is obliged to cast it off (moult). Watch and see how often he changes his skin covering before he is full grown.

Structure.—Direct attention to shape of body (cylindrical), size, number of segments, number of legs and eyes. To which segments are the legs attached? What is the difference between the first three pairs of legs and the other five pairs? Children will delight in watching the change into pupa or chrysalis,—a resting stage.

Spinning.—When full grown, observe restlessness and change of color. Watch it spinning a tuft of silk and fastening it to a support. Children will soon have an opportunity to read the most interesting chapter in the life of a butterfly. The beauty of the chrysalis cannot compare with the beauty of the white winged creature that makes its appearance when the chrysalis opens. The chrysalis formed in August or September may become a butterfly in a few weeks. Children, watch the change in form and size of wings and body.

Review the life history; egg, larva, chrysalis, butterfly, and develop the following facts with as few questions as possible.

BUTTERFLY

Study the living butterfly.

Body divided into three parts; head, thorax, and abdomen.

The tongue is long and slender and when not in use is coiled like the spring of a watch. Provide a few drops of sugar and water and let children see the tongue uncoil. It is fine enough to thrust into the narrowest and longest flowers for nectar.

Feelers, or antennae, long and slender with little knobs at the end.

Six slender, weak legs. It uses its legs only when eating or resting.

Wings, four in number, are covered with scales, which overlap like the scales of a fish. Scales are attached to the wings by tiny stems. Let children examine the scales with a magnifying glass, if possible. They are very beautiful and give the wings their color. The fore wings are triangular and the hind ones rounded.

The legs and wings are attached to the thorax. Let children sketch and paint the butterfly in different positions on flowers. Compare caterpillar and butterfly as to habits, structure, form, and color.

The life of a butterfly is very brief. Give the little creatures their freedom and watch them on the flowers in the sunshine.

READ:

I've watched you now a full half hour,
Self-poised upon that yellow flower;
And little butterfly, indeed,
I know not if you sleep or feed.
How motionless!—not frozen seas
More motionless—and then
What joys await you when the breeze
Hath found you out among the trees,
And calls you forth again.
This plot of orchard ground is ours,
My trees they are, my sister's flowers;
Here rest your wings when they are weary,
Here lodge as in a sanctuary.
Come to us often, fear no wrong,
Sit near us on the bough.
We'll talk of sunshine and of song,
And summer days when we were young;
Sweet childish days, that were as long
As twenty days are now.

—WORDSWORTH.

Try to lead the children to see, in imagination, the scenes pictured in the poem.

Compare with moth and milkweed butterfly.—Development, structure, habits, etc.

Compare with the dragon fly which has four beautiful gauze-like net-veined wings, long slender body, large head with gem-like eyes. Home near the water; lives on insects; always on the wing; flight direct.

"The Butterfly," by Mrs. Sigourney, contains a beautiful thought:

A butterfly basked on a baby's grave,
Where a lily had chanced to grow:
"Why art thou here, with thy gaudy dye,
When she of the blue and sparkling eye,
Must sleep in the church yard low?"
Then it lightly soar'd through the sunny air,
And spoke from its shining track:
"I was a worm till I won my wings,
And she whom thou mourn'st like a seraph sings:
Wouldst thou call the bless'd one back?"

Hamilton Gibson says:

It was a day in early June, and nature was bursting with exuberance. The very earth was teeming with awakened germs—here an acorn, with its biformed hungry germ—parody on the dual mission of mortal life—one seeking earth, the other heaven; here an odd little elf of maple, with his winged cap still clinging as he danced upon his slender stem; while numerous nameless green things clove the sod, and matted leaves and slender coils of ferns unrolled in eager grasp from their woolly winter nest.

But dear to my heart as were these familiar tokens, how quickly were they all forgotten in my contemplation simply of a little stone that lay upon a patch of mould directly at my elbow, and my wondering eyes were riveted upon it, for it seemed as though in the universal quickening even this also had taken life.

I can see it this moment. It moves again, and yet again, until now, with a final effort, it is lifted from its setting and rolled away, while in its place there protrudes from the ground a chrysalis risen

from its sepulchre. Filled with wonder, I sit and watch as though in a dream, awaiting the revelation from this mysterious earthly messenger, when suddenly the encasement swells and breaks, the cerements are burst, and the strange shape gives birth to the form of a beautiful moth—a tender, trembling thing, which emerges from the empty shell and creeps quivering upon an overhanging spray.

Now followed that beautiful and wondrous unfolding of the winged life—the softly-falling crumpled folds, the quivering pulsations of the new born wings eager for their flight, until at length their glory shone in purity and perfection—a trial flutter, and the perfect being took wings and flew away. * * * *

From Highways and Byways. Copyrighted in 1882 by Harper and Brothers.

A LITTLE POET

Out in the garden, wee Elsie
  Was gathering flowers for me;
"O, mamma," she cried, "hurry, hurry,
  Here's something I want you to see."
I went to the window. Before her
  A velvet winged butterfly flew,
And the pansies themselves were not brighter
  Than the beautiful creature in hue.

"O, isn't it pretty?" cried Elsie,
  With eager and wondering eyes,
As she watched it soar lazily upward
  Against the soft blue of the skies.
"I know what it is, don't you, mamma?"
  Oh, the wisdom of these little things
When the soul of a poet is in them,
  "It's a Pansy—a Pansy with wings."

—Eben E. Rexford, in Pri. Education.

THE MILKWEED

Purpose of the Work.—To call attention to the way seeds are protected.

To emphasize the necessity for seed distribution.

Center study of seed dispersal about the Milkweed and the Dandelion.

Preparation.—Talk with pupils about animals moving from place to place at will. How do the birds manage to see so many different places and people? The spiders have no wings, how do they change their homes? Some of the children will know that the spiders spin a long, silken web, accept the services of the wind and start on their journey. Let them suggest names of different animals that have power to flee from danger or go in search of food when occasion demands. Children, name other things around us besides animals that are useful and beautiful. Flowers, trees, grasses and grains will, no doubt, be suggested.

Field Lesson.—Take pupils out doors to see the milkweed. Give children something definite to look for. Find a milkweed in blossom. One with green or brown pods. Why called milkweed? What kind of soil does it like? Name the flowers and trees growing near. Call children together, talk over their discoveries, and correct mistakes in the presence of the growing plants. Pull up a large plant and account for the spongy appearance of the roots with ripe seeds. The milky appearance of the roots and stems in plants with unripe seeds. Call attention to the shape, number, and arrangement of leaves on the stem. Examine flowers.

THE MILKWEED CASE

Cover and case locked close together,
Filled with a curious kind of feather,
Open the box, you'll need no key,
Oh! pretty green case did you grow for me?
'Twas only the other day I said,
I must make my dolly a feather bed,
And here is the softest fluffiest stuff,
Silky and white and plenty enough.

Children open a seed cradle and notice how beautifully the seeds are arranged. Examine the lining and the outside covering. They will discover the delicate, smooth lining next to the seeds, and the tough, firm outside coat.

Place special stress upon protection at this stage of the work. Direct attention to the position of the pods near the top of the stems, the firm ridge along the middle of the pod, and the

spring that enables the little brown cradle to rock in the breeze.

Lead children to think of the baby milkweed plant wrapped up in each seed. Watch the seeds flying in all directions in search of a home. Some may travel on the "wings of the wind" to the end of their journey, some may be carried far away by beautiful birds, others may find a place to grow near their own brown cradle. Dig up two or three milkweeds in different stages of development and plant near the school so that children may have a chance to see the flowers withering, pods forming, green pods turning brown, and the seed cradles opening.

Again direct attention to the work of the growing milkweeds. Lead children to think of the dependence and interdependence of the different parts of the plants,—root, stem, leaves, flowers; discuss the work of each; all parts working to produce seeds. Seeds must be very precious.

Let a pupil open a ripe pod and crowd the seeds into a glass jar, so that the class may see how many seeds were packed in this little house. Estimate the number of seeds growing on a single milkweed. Suppose the seeds fell from the cradles and settled down near the plant on which they grew. Recall experiments with morning-glory and other flowers, in which children discovered that growing plants must have food, heat, moisture, and light, and they will readily see that the crowded seedlings would have too great a struggle for food and sunshine,—for life. Think of the thousands of little rootlets searching for food in one direction for a time and then in another, only to meet hosts of hungry, little workers like themselves. Children will understand that when the seeds are alike the struggle is greater than when they are different. When they are alike all need the same kind of nourishment and sometimes the parent plant takes so much food from the

soil in which it grows that it is impossible for the seedlings to get a foothold.

Hang a number of pods where children can watch them opening and the seeds flying away. How eager they seem to get out of the old home! Why are the seeds provided with sails? In order to fly away to a spot that is not occupied by some other plant. The wind is a good friend to the seeds with sails or wings. Why?

It was only a little plant,
But on it did shine the sun,
The wind did caress, the birds did sing,
And it lived till its work was done.
It was only a little plant;
But it took a gladsome part
In the great earth's life; and at last
Earth clasped it to her heart.
—M. J. SAVAGE.

Lead children to compare the milkweed with the dandelion. Home; characteristics; work of root, stem, leaves, and flowers; structure; how seeds are protected; number of seeds; how scattered; uses; draw plants.

Let children make a collection of seeds and fruits.

How are seeds protected? (Burrs, shells, flesh, etc.)

Some of nature's devices for the dispersal of seeds and fruits.

Sails—dandelion, milkweed, cat's-tail, thistle. Springs—touch-me-not.

Hooks—burdocks, stick-tights. Wings—maple, linden.

How Scattered.—Wind, water, and animals; man scatters more seeds than all other agencies combined; he is constantly buying and selling plants and seeds.

Make a collection of edible seeds. Wheat, oats, corn, peas, nuts, etc.

Children, tell how the blue-jays and squirrels distribute seeds.

Let pupils group seeds that have pods. Catalpa, beans, pepper, etc. Which has the prettiest color and shape? Which grow on trees? Which contains the greatest number of seeds? What becomes of all the seeds that ripen every year? Do you think all the seeds not used for food will be likely to fall upon

good soil? The earth would be overrun with plants if even a small per cent of all the seeds that ripen grew.

Children, collect seeds to plant next spring.

MILKWEED BABIES

Dainty milkweed babies, wrapped in cradles green,
Rocked by Mother Nature, fed by hands unseen.
Brown coats have the darlings, slips of milky white,
And wings—but that's a secret,—they're folded out of sight.

The cradles grow so narrow, what will the babies do?
They'll only grow the faster, and look up toward the blue.
And now they've found the secret, they're flying through the air,
They've left the cradles empty,—do milkweed babies care?

—ELEANOR SMITH'S *Songs for Little Children*, No. 2.

By permission Milton Bradley Co.

THE WIND PRINCESS

Little Ben Lee had a pretty flower bed in his mother's garden. All the long summer he had cared for it, never once seeing the fairy Wind Princess, who often stood by his side, she too helping the plants to grow and blossom.

One day in the late fall this fairy whispered to the flowers, "It has grown so cold I will ask the North Wind to bring you a fluffy blanket of white to keep you warm through the cold winter," and away she went in her magic car to the North Wind's home.

He lived high up among the snow mountains with his father, Ice King, in a wonderful crystal palace. It was hung with dainty curtains of frost work made by the roguish Jack Frost himself, and the walls and towers were painted in beautiful rainbows whenever the sunshine came to visit it.

Soon the flowers heard the great North Wind coming, and sure enough he brought with him the soft snow blanket that helped them to sleep safe and warm until spring time.

After many months the sleepy blossoms heard the Wind Princess whisper to them, "I will ask the South Wind to come with its warm breath, and help the sun to take away your winter covering so you may see the garden and the sky." Then off she drove in her magic car to the South Wind's Home. This wind lived with the lovely Flora in an arbor of flowers and vines in the midst of a wonderful garden. The air was laden with perfume, and the birds sang there all the day long.

Soon the flowers felt the breath of the gentle South Wind and knew the snow mantle had gone from their bed, and they opened their sweet eyes.

After a few days the Fairy Princess came again, this time to tell them she was going to bring the East Wind to visit them, for she saw how the velvet blossoms needed some warm rain drops.

So early next morning, the kind Princess flew to the eastern home where Aurora lives, to ask the East Wind's help to send rain to the garden bed. Oh! how beautiful the palace of the dawn looked! With its walls and domes and columns all of shining silver, and its entrance hung with rosy cloud curtains, pinned back by a silver star.

As the East Wind hurried the rain drops down to the waiting plants, they bowed their heads as if in thanksgiving for the refreshing shower.

Just at night, one rainy day, the flowers saw the Princess of the Winds driving her car as fast as she could to the golden palace of the West Wind, and they said among themselves: "The dear Princess has gone to ask West Wind to blow away the clouds that we may have a fair day to-morrow."

The rain ceased soon after the Princess reached the sunset palace on her errand of love. The queen of this gorgeous home drew aside the curtain of crimson and gold and stood at the entrance of the palace to receive her royal guest.

"Oh! what a grand sunset," cried little Ben Lee, as he looked toward the west that evening, but he never guessed who stood in the cloud palace asking the kind West Wind to come next day and help his plants to grow; he only knew that God loved flowers and birds and little children, and in His own wise way helped them to live and make the world more beautiful.

—Sophia S. Bixby.

CHILDREN MEMORIZE:

SEVEN TIMES ONE

There's no dew left on the daisies and clover,
  There's no rain left in heaven;
I've said my "seven times" over and over,
  Seven times one are seven.

I am old, so old, I can write a letter,
  My birthday lessons are done;
The lambs play always, they know no better;
  They are only one times one.

O Moon! in the night I have seen you sailing
  And shining so round and low;
You were bright! ah, bright! but your light is failing—
  You are nothing now but a bow.

You Moon, have you done something wrong in heaven
  That God has hidden your face?
I hope if you have, you will soon be forgiven,
  And shine again in your place.

O velvet Bee, you're a dusty fellow,
  You've powdered your legs with gold!
O brave Marsh-Marybuds, rich and yellow,
  Give me your money to hold!

O Columbine, open your folded wrapper
  Where two twin turtle-doves dwell!
O Cuckoo-pint, toll me the purple clapper
  That hangs in your clear green bell!

And show me your nest with the young ones in it;
  I will not steal them away;
I am old! you may trust me, linnet, linnet—
  I am seven times one to-day.

—JEAN INGELOW.

THE POPPY

Direct attention to the poppy. Give questions to be answered by studying the plants in the garden. Bring a whole plant to the school-room and compare it with one or two flowers previously studied—nasturtium, pansy, etc.

Celia Thaxter's exquisite poem will help to impress the beauty and the mystery of a seed.

In "An Island Garden" she says: Of all the wonderful things in the wonderful universe of God, nothing seems to me more surprising than the planting of a seed in the black earth and the result thereof. Take a poppy seed, for instance: It lies in your palm, the merest atom of matter, hardly visible, a speck, a pin's point in bulk, but within it is imprisoned a spirit of beauty ineffable, which will break its bonds and emerge from the dark ground in a splendor so dazzling as to baffle all powers of description.

POEM FOR READING AND DISCUSSION

A POPPY SEED

A poppy seed in your hand I lay!
You hardly see it! "Does anything hide
In that wee atom of dust?" you say.
Yes, wonderful glory is folded inside!

Robes, my dear, that are fit for kings;
Scarlet splendor that dazzles the eyes;
Buds, flowers, leaves, stalks,—so many things!
You look in my face with doubting surprise.

You ask, "Is it really, truly true?"
No fairy story at all this time!
Don't you remember the poppy that grew
At the foot of the trellis, where sweet peas climb?

Last summer, close to the doorstep, where
You and I loved to sit in the sun
And see the butterflies float in the air
When the long bright day was almost done?

Don't you remember what joy we had,
Watching the poppy grow high and higher,
In its lovely gray-green garments clad,
Till the buds one evening showed streaks of red?

Then the flowers, like banners of silken flame
Unfurled, stood each on its slender stem,
While the soft breeze over them went and came
Lightly and tenderly rocking them.

You haven't forgotten! I was sure of it! Well,
All that perfection of shape and hue,
That wreath of beauty no tongue can tell,
Lies hid in this seed I have given to you.

Just such a speck in the friendly ground
I planted last May by the doorstep wide;
The self-same marvel that then we found,
This atom of dust holds shut inside.

You can't believe it? But all are there,—
Leaves, roots, flowers, stalks, color, and glow,
Tell me a story that can compare
With this for a wonder, if any you know.

—CELIA THAXTER.

Children, save poppy seeds to plant next spring so that they may see what the writer has pictured.

GENTIANS

Flowers large and handsome.

Fringed Gentian.—Corolla a rich blue, with beautifully fringed lobes. Flowers single, on a naked stalk.

Closed Gentian.—Flowers in clusters. Corolla blue; five fringe-toothed plaits.

The "Fringed Gentian" is a great favorite with poets and artists. Compare the gentian with the aster and the golden-rod.

COMMIT:

THE BLUE GENTIAN

"Oh! gentian I have found you out
And you must tell me true;
See, I'll put my ear close down,
Where did you get your blue!"

"I found it, little one, here and there,
It was ready made for me;
Some in your eyes, and some in the skies
And some in the dark blue sea."

"And where did you get that love fringe,
Gentian, that you wear?"
"I caught a hint from your dark eyelash
And one from your curling hair."

"And why do you stand so straight and tall
When they say that you are wild?"
"Oh! that I learned in a different way
And not from any child."

—SELECTED.

Study Bryant's poem, "The Gentian"

LEGEND OF THE GENTIAN

The closed Gentian never opens. The Fringed Gentian closes before dark. This is the story that accounts for the difference in the flowers.

Once upon a time the Queen of the Fairies was out very late. Indeed, it was midnight and the silvery moon had disappeared. The fairy hurried to a Gentian and asked for shelter. The sleepy Gentian said, "How dare you disturb me at this late hour. Find shelter wherever you can." "I am the Queen of the Fairies," said the poor frightened

little one. "I do not care for queens or kings," said the Gentian, "I cannot help you." The Fairy Queen hurried away to another Gentian and begged for a resting place. "Dear little friend," she said, "I shall be happy to shelter you until the sun appears." The Queen slept soundly until nearly dawn and then disappeared. Before going she said, "Dear Gentian, in future you and all your children shall have power to open and receive the light."

—ADAPTED.

MAKE A SPECIAL STUDY OF THIS POEM:

FLOWERS

Spake full well, in language quaint and olden,
One who dwelleth by the castled Rhine,
When he called the flowers, so blue and golden,
Stars, that in earth's firmament do shine.

Stars they are, wherein we read our history,
As astrologers and seers of old;
Yet not wrapped about with awful mystery,
Like the burning stars, which they beheld.

Wondrous truths, and manifold as wondrous,
God hath written in those stars above;
But not less in the bright flowrets under us
Stands the revelation of His love.

Bright and glorious is that revelation,
Written all over this great world of ours;
Making evident our own creation,
In these stars of earth, these golden flowers.

Everywhere about us are they glowing,
Some like stars, to tell us Spring is born;
Others, their blue eyes with tears o'erflowing,
Stand like Ruth amid the golden corn;

Not alone in Spring's armorial bearing,
And in summer's green-emblazoned field,
But in arms of brave old Autumn's wearing,
In the center of his brazen shield;

Not alone in meadows and green alleys,
On the mountain top, and by the brink
Of sequestered pools in woodland valleys,
Where the slaves of nature stoop to drink;

Not alone in her vast dome of glory,
Not on graves of bird and beast alone,
But in old cathedrals, high and hoary,
On the tombs of heroes, carved in stone;

In the cottage of the rudest peasant,
In ancestral homes, whose crumbling towers,
Speaking of the Past unto the Present,
Tell us of the ancient Games of Flowers.

—LONGFELLOW.

TREES

Aim.—To lead children to appreciate and love the trees.

Trees are of universal importance and interest; they exert a refining influence of untold value and are generally available for study in every locality. We are indebted to them in numberless ways for many of the comforts and luxuries of life. The varied forms and colors have a great attraction for children and they should be taught to know and to love the trees.

"How beautiful you are, green trees! * * *
How nobly beautiful! Here ye stand,
Your moss-grown roots by hidden moisture fed,
And on your towering heads the dews that fall
From God's right hand. Methinks an angel's wing
Floats o'er your arch of verdure, glorious trees!
Luring the soul above."

—MRS. SIGOURNEY.

Froebel declares that no more perfect representation of organic life and the mutual relation of its parts can be found in nature than a tree.

Irving says, "There is something nobly simple and pure in a taste for the cultivation of forest trees. It argues, I think,

a sweet and generous nature to have this strong relish for the beauties of vegetation and this friendship for the hardy and glorious sons of the forest. He who plants a tree looks forward to future ages, and plants for posterity. Nothing could be less selfish than this."

The very best gifts of God are so common, we do not half appreciate their worth. The poet Holmes speaks of the "trees holding their green sunshades over our heads, talking to us with their hundred thousand whispering tongues." Take the children "forth amid the breeze-swept trees and learn their language."

All honor to the forest!
Each breeze a message brings,—
"Be brave," from Oaks and Cedars,
"Look up," the Pine tree sings,
"Oh, earth is fair," the Elm calls,
"And Heaven is just above!"
"Do good," the Maples whisper,
All chorus, "God is love."

—ALICE ALLEN.

Impress the fact that the trees are living things and have important work to do. What? Why? Let children find a good tree for a swing. A tree that has food for the squirrels and birds. What is its name? How many of its neighbors are we acquainted with? Which one begins to branch lowest down? Which one has the smoothest bark? Find a tree with a bird's nest. Find seedlings growing.

Teacher, picture the life of one of the tall trees. It was once a small seed; the parent tree sent it down to the earth to begin its life work; the warm sun visited the spot where it lay hidden and it began to increase in size and strength, and year by year it became more deeply rooted and its leafy boughs stretched farther and farther from the trunk. The birds and the flowers sent sweet messages of good will and the

FOREST SONG

A song for the beautiful trees,
A song for the forest grand,
The pride of His centuries,
The garden of God's own hand.
Hurrah for the kingly oak,
The Maple, the forest queen,
The lords of the emerald cloak,
The ladies in living green.

—W. H. VENABLES.

grand old trees whispered, "Grow, grow."

At this time the great aim is to arouse interest and lead children to go to the trees for answers to the questions asked from day to day. Inspiration and information should go hand-in-hand. Let children tell what they know about the uses of trees,—fruit, fuel, lumber, medicine, etc. In addition to the endless number of uses, their beauty alone would warrant us in cultivating, protecting and loving them. Addison says: "There is something unspeakably cheerful in a spot of ground which is covered with trees, that smiles amid all the rigors of winter, and gives us a view of the most gay season in the midst of that which is the most dead and melancholy."

THE AMERICAN ELM

Children, select a typical Elm for continuous study throughout the year and contrast it with the maple.

Field Lesson.—Visit the tree with pupils and lead them to discover some of its characteristics,—height, shape of head, appearance of trunk, etc. Lead children to talk about its life, its work, and its helpers,—sun, rain, and soil. Emphasize dependence and interdependence.

Imagine some of its probable experiences during its life time. The birds that have built and sung in its branches; the squirrels, insects and other visitors it has sheltered; the many seeds it has sent into the world to grow tall and majestic like itself. Tell children we came to the tree to discover the reasons why the elm is so well liked, by people in the cities as well as in the country.

By studying the head of the tree they will discover why it is a great favorite as a shade tree. The arching character of the branches and the drooping, lace-like twigs give the tree a very graceful appearance and has won for it universal admira-

tion as a shade tree. Teacher, read for children "The Wonderful One Horse Shay." The toughness of the wood is immortalized by this poem. The branches bend but rarely break in a wind-storm. The wood is valuable for wheel-hubs, yokes and cabinet work. Orioles' nests are often found in its branches.

Historic Elms.—The Treaty of Wm. Penn was made beneath the shade of an elm in Philadelphia. Washington took command of the American Army at Cambridge, Mass., under an elm. The Burgoyne Elm at Albany, N. Y., was planted the day Burgoyne was brought to Albany a prisoner. The Liberty Elm stood on Boston Common until within a few years ago.

To know a tree is not merely to know its name, but rather to know its distinguishing features, its needs, its work, its rank, its mission.

Enemies.—The canker-worm and the black caterpillar are among its worst enemies.

Call attention to the difference in shape of elms growing in open places and those growing where they are crowded.

Children should visit the favorite tree very often; watch its leaves change color and disappear in autumn; observe and sketch the tree after the leaves have fallen; examine it when it is in blossom, also when the fruit is maturing; watch the development of buds and leaves and the changes in color of foliage from month to month; in a word, study its life history all through the year.

Develop the following facts by questioning as far as possible. Elm—dome, umbrella or vase-shaped; the bark, dark gray and rough, and the wood reddish brown, strong, and tough.

The elm branches are arching, drooping, and graceful, with fine, delicate spray and small shiny buds.

The leaves are simple, medium sized, rough, alternate arrangement, with short petioles, and deep green in color.

The flowers are tiny, brownish yellow or reddish clusters, which develop into samaras, winged fruit.

It is highly prized as a city shade tree except where soft coal is constantly used. The soot sticks to the rough leaves and after a time injures the tree.

SPRING HAS COME

The elms have robed their slender spray
With full-blown flower and embryo leaf.
Wide o'er the clasping arch of day
Soars like a cloud their hoary chief.
—HOLMES.

Consider the space required for the branching of the elm and decide how far apart the trees should be planted.

THE OAK

Aim.—To discover the character and the uses of the tree.

The majestic beauty and strength of the oak make it the glory of the forest; and in all ages, among all people, it has been looked upon with reverence. It is famous alike in poetry and prose. This is Bryant's tribute,—

"This mighty oak
By whose immovable stem I stand and seem
Almost annihilated—not a prince
In all the grand old world beyond the deep,
E'er wore his crown as loftily as he
Wears the green coronal of leaves with which
Thy hand has graced him."

This monarch may be visited at any time without the least ceremony, and if approached with a teachable spirit, his individuality must leave its impress upon the character. Everything about the oak suggests benevolence, power, and concentration,—the gnarled root, the rugged bark of the trunk, the hard, durable wood, and the firm, tough leaves.

If there is an oak growing near your school by all means induce pupils to make friends with it and learn to admire its noble qualities. Tell children that the oak with its broad base and curving trunk suggested to a thoughtful man across the ocean the best model for the Eddystone Light-house, which

has battled with the storms and tempests for nearly one hundred and fifty years, and to-day stands firm as a rock.

Direct attention to the sturdy appearance of the tree,—short, broad trunk; low, gnarled, outstretched branches, each one resembling a tree. The oak sends a strong tap root deep into the ground, while its wide-spreading, horizontal roots remain nearer the surface. When you visit him in the spring and see nearly all his neighbors decked in green, you may think that he has been forgotten. Watch daily and you will see that Mother Nature has a very beautiful crown for her forest king.

"Children, have you seen the budding
Of the trees in valleys low?
Have you watched it creeping, creeping
Up the mountain, soft and slow?
Weaving there a plush-like mantle,
Brownish, grayish, reddish, green,
Changing, changing, daily, hourly,
Till it smiles in emerald sheen?"

—MOTHER TRUTH'S MELODIES.

The oak has hundreds of years to live and can afford to wait longer for his "green coronal of leaves" than his short lived neighbors.

Let children tie a string around an acorn, hang it in a bottle of water and watch the beginning of an oak.

Plant in window-box and find out how the growing end is protected from injury while pushing up through the soil.

Try to find an acorn with two kernels; find two or three young oaks coming up together and see if they belong to one acorn.

Compare germination of oak and maple.

Visit in imagination a tan-yard; a forest of cork oaks in Spain.

Study the beginnings of galls on the trees in May. It is estimated, that about fifteen hundred insects make their homes in the oak.

Compare the oak with the pine.

The oak bears two kinds of flowers on the same tree. The staminate flowers grow in catkins. The pistillate flowers re-

semble tiny pink balls. The pistil becomes the nut of the acorn. Some oaks drop their acorns at the end of about six months (annual fruited); others wait for a year and a half (biennial fruited).

There are perhaps three hundred kinds of oak in the world.

Much of the beautiful carving, which is seen in the great cathedrals in Europe, is on oak wood.

The Greeks believed it was the first tree that grew upon earth.

A chaplet of oak leaves was the highest honor that could be given to a Roman soldier.

There are oaks in England that are known to be over a thousand years old.

The Round Table of King Arthur at Winchester is a cross section of an old oak eighteen feet in diameter.

The Charter Oak is the most famous American oak. Why?

Sum up uses of the oak.

Acorn, important article of food in parts of Asia.

Bark used for tanning and dyeing.

Wood unsurpassed for durability and strength.

The monarch oak, the patriarch of trees,
Shoots rising up, and spreads by slow degrees;
Three centuries he grows, and three he stays
Supreme in state, and in three more decays."

THE LAST DREAM OF THE OLD OAK

In the forest, high up on the steep shore, and not far from the open sea-coast, stood a very old oak tree. It was just three hundred and sixty-five years old, but that long time was to the tree as the same number of days might be to us; we wake by day and sleep by night, and then we have our dreams. It is different with the tree; it is obliged to keep awake through three seasons of the year and does not get any sleep till winter comes. Winter is its time for rest; its night after the long day of spring, summer and autumn.

The oak remained awake through the morning of spring, the noon

of summer, and the evening of autumn; its time of rest, its night, drew nigh—winter was coming. Already the storms were singing, "Good-night, good night." Here fell a leaf and there fell a leaf. "We will rock you and lull you. Go to sleep, go to sleep. We will sing you to sleep, and shake you to sleep, and it will do your old twigs good; they will even crackle with pleasure. Sleep sweetly, sleep sweetly, it is your three-hundred-and-sixty-fifth night. Correctly speaking, you are but a youngster in the world. Sleep sweetly; the clouds will drop snow upon you, which will be quite a coverlid, warm and sheltering to your feet. Sweet sleep to you and pleasant dreams."

And there stood the oak, stripped of all its leaves, left to rest during the whole of a long winter, and to dream many dreams of events that happened in its life, as in the dreams of men.

The great tree had once been small; indeed, in its cradle it had been an acorn. According to human computation, it was now in the fourth century of its existence. It was the largest and best tree in the forest. Its summit towered above all the other trees, and could be seen far out at sea, so that it served as a landmark to the sailors. It had no idea how many eyes looked eagerly for it. In the topmost branches the wood-pigeon built her nest, and the cuckoo carried out his usual vocal performance, and his well-known notes echoed amid the boughs; and in autumn, when the leaves looked like beaten copper plates, the birds of passage would come and rest upon the branches before taking their flight across the sea.

But now it was winter, the tree stood leafless, so that every one could see how crooked and bent were the branches that sprang forth from the trunk. Crows and rooks came by turns and sat on them, and talked of the hard times which were beginning, and how difficult it was in winter to obtain food.

THE DREAM

It was just about holy Christmas time that the tree dreamed a dream. The tree had, doubtless, a kind of feeling that the festive time had arrived, and in his dream fancied he heard the bells ringing from all the churches round, and yet it seemed to him to be a beautiful summer's day, mild and warm. His mighty summit was crowned with spreading fresh green foliage; the sunbeams played among the leaves and branches, and the air was full of fragrance from herb and blossom; painted butterflies chased each other; the summer flies danced

around him, as if the world had been created merely for them to dance and be merry in. All that had happened to the tree during every year of his life seemed to pass before him as if in a festive procession.

The wood-pigeons cooed as if to explain the feelings of the tree, and the cuckoo called out to tell him how many summer days he had yet to live. Then it seemed as if new life was thrilling through every fibre of root and stem and leaf, rising even to the highest branches. The tree felt itself stretching and spreading out, while through the root beneath the earth ran the warm vigor of life. As he grew higher and still higher, with increased strength, his topmost boughs became broader and fuller; and in proportion to this growth so was his self-satisfaction increased, and with it arose a joyous longing to grow higher and higher, to reach even to the warm, bright sun itself.

Already had his topmost branches pierced the clouds, which floated beneath them like troops of birds of passage, or large white swans; every leaf seemed gifted with sight, as if it possessed eyes to see. The stars became visible in broad daylight, large and sparkling, like clear and gentle eyes.

These were wonderful and happy moments for the old tree, full of peace and joy; and yet amidst all this happiness, the tree felt a yearning, longing desire that all the other trees, bushes, herbs, and flowers beneath him, might be able also to rise higher, as he had done, and to see all this splendor, and experience the same happiness. The grand, majestic oak could not be quite happy in the midst of his enjoyment, while all the rest, both great and small, were not with him. And this feeling of yearning trembled through every branch, through every leaf, as warmly and fervently as if they had been the fibres of a human heart.

The summit of the tree waved to and fro, and bent downwards as if in his silent longing he sought for something. Then there came to him the fragrance of thyme, followed by the more powerful scent of honeysuckle and violets; then he fancied he heard the note of the cuckoo.

CAUSE OF HAPPINESS

At length his longing was satisfied. Up through the clouds came the green summits of the forest trees, and beneath him, the oak saw them rising, and growing higher and higher. Every native of the wood, even to the brown and feathery rushes, grew with the rest, while the birds ascended with the melody of song. May beetles hummed,

bees murmured, birds sang, each in its own way; the air was filled with the sounds of song and gladness.

"But where is the little blue flower that grows by the water?" asked the oak, "and the purple bell-flower, and the daisy? I want them all."

"Here we are, here we are," sounded in voice and song.

"But the beautiful thyme of last summer, where is that? and the lilies-of-the-valley, which last year covered the earth with their bloom? and the wild apple tree with its lovely blossoms, and all the glory of the wood, which has flourished year after year?"

"We are here, we are here," sounded voices higher in the air, as if they had flown there beforehand.

"Why, this is beautiful, too beautiful to be believed," cried the oak in a joyful tone. "I have them all here, both great and small; not one has been forgotten. Can such happiness be imagined?" It seemed almost impossible.

"In heaven with the Eternal God, it can be imagined, for all things are possible," sounded the reply through the air.

And the old tree, as it still grew upwards and onwards, felt that his roots were loosening themselves from the earth.

"It is right so, it is best," said the tree, "no fetters hold me now. I can fly up to the very highest point in light and glory. And all I love are with me, both small and great. All—all are here."

Such was the dream of the old oak: and while he dreamed, a mighty storm came rushing over land and sea, at the holy Christmas time. The sea rolled in great billows towards the shore.

There was a cracking and crushing heard in the tree. The root torn from the ground just at the moment when in his dream he fancied it was being loosened from the earth. He fell—his three-hundred and sixty-five years were passed.

On the morning of Christmas day, when the sun rose, the storm had ceased. From all the churches sounded the festive bells, and from every hearth, even of the smallest hut, rose the smoke into the blue sky. The sea gradually became calm, and on board a great ship that had withstood the tempest during the night, all the flags were displayed, as a token of joy and festivity.

"The tree is down! The old oak—our landmark on the coast!" exclaimed the sailors. "It must have fallen in the storm of last night. Who can replace it? Alas! no one!" This was a funeral oration over the old tree; short but well meant.

There it lay stretched on the snow-covered shore, and over it sounded the notes of a song from the ship—a song of Christmas joy, and every one on board the ship felt his thoughts elevated, through the song and prayer, even as the old tree had felt lifted up in its last, its beautiful dream on that Christmas morn.

—HANS ANDERSON.

THE GRAVE IN THE FOREST

"A great tree fell in the forest,
With a crashing, thunderous sound,
Slowly and terribly stretching
His ponderous length on the ground,
And lay at the feet of his brothers
Mangled and dead,
Just as a mighty giant
Would pillow his head.

—SELECTED.

THE OAK

"Sing for the oak tree, the monarch of the wood.
Sing for the oak tree, that groweth green and good!
That groweth broad and branching within the forest shade;
That groweth now, and still shall grow when we are lowly laid.

The oak tree was an acorn once, and fell upon the earth;
And sun and shower nourished it, and gave the oak tree birth;
For centuries grows the oak tree, nor does its verdure fail;
Its heart is like the iron wood, its bark like plaited mail.

—SELECTED.

TREE LEGENDS

There are stories enough, beautiful little stories, too, about the trees to fill a whole book, and to enable you to entertain your friends in the woods for days and days.

The Ash tree, as well as certain other trees, was believed to be weather-wise. You people say now, "See the leaves of the Poplar

turning their silver side up. It must be going to rain." The Bay tree was supposed to be a protection from lightning. The Willow was an emblem of sadness. * * * But what about the Aspen tree? A German legend tells us that when Joseph and Mary were fleeing with the infant Jesus, they entered a very dense forest.

As soon as they were beneath the shelter of the forest, the trees all bowed their heads in reverence to the Divine Child. All except the Aspen, that lifted its head only a little higher, refusing to pay homage to anything on earth.

Then Christ cast one sad reproachful look upon this tree, so full of sorrow and reproof, that it pierced straight to its very heart. And lo! it began to tremble and has never for one moment ceased in all these centuries.

—*Fairyland of Flowers.*

Do you know how oddly the boughs of the Lombardy Poplar grow? Straight up in the air; making the tree look, as some one has said, for all the world, like an umbrella turned inside out by a gale. Of course, in the Legend world there must be a reason for this. Here it is. Some one had stolen the pot of gold which is said to be at the end of the rainbow.

The Wind messengers were sent to search for it. The Elm, the Oak, the Pine, all the trees had been asked if they knew the thief. All pointed their leaves toward the Poplar, saying, "The Poplar knows! the Poplar knows!"

"I know?" said the Poplar, raising its branches in pretended surprise. "Why, how should I know?"

But just then the pot of gold was seen shining through the leaves. The Wind messengers at once seized upon the gold, and as a punishment, the Poplar was doomed to hold its arms in just that position forever, as a warning to all other trees to be honest.

It seems rather a pity to tell such a story of so beautiful a tree. But it doesn't hurt the tree after all; and as nobody believes it, no harm is done, and we are amused for the time by the story.

"All my Master's works are fair, no flaw in them is seen;
And yet the dear trees best of all I love to see, I ween."

Stories told of us, if they are not true, do us little harm; for like spatters of mud, they will come off when they're dry.

—*Fairyland of Flowers.*

FALL LEAVES

Beauty of Leaves.—The beauty of color and texture combined with the endless variety of leaf forms cannot fail to prove a constant source of wonder and delight to the children during this season of bright, blue weather. Thoreau says,

"October is the month of painted leaves. Their rich glow now flashes round the world. As fruit and leaves, and the day itself acquire a bright tint just before they fall, so the year near its setting. October is its sunset sky. November the later twilight."

—*"Excursions."*

There are stupendous questions even in leaves, questions yet unanswered in opening buds, questions that glisten in the air on plumy seeds, riddles in rainbow colors imprisoned in a petal, and an endless catechism hangs on many a fragile stem.

—*Gibson Highways.*

It is desirable to center observation chiefly upon one or two trees, as the maple and the oak. Visit trees with pupils and impress the fact that the beauty of the leaves is scarcely equalled by their use.

Encourage children to collect and press leaves for the decoration of the school-room. Group trees dressed in red and yellow, crimson, purple and green.

Notice which trees change color first, which send their leaves to the earth first. Some day when the leaves are whirling down read "October's Party," or "How the Leaves Came Down."

Let pupils sketch leaves related to the branches and fruit, as oak branch with leaves and acorns, pine branch with needles and cones.

BEFORE THE LEAVES FALL

I wonder if oak and maple,
Willow and elm and all,
Are stirred at heart by the coming
Of the day their leaves must fall.
Do they think of the yellow whirlwind,
Or know of the crimson spray,
That shall be when chill November
Bears all their leaves away?

Perhaps—beside the water
The willow bends, serene
As when her young leaves glistened
In a mist of golden green;
But the brave old oak is flushing
To a wine-red, dark and deep,
And maple and elm are blushing
The blush of a child asleep.

"If die we must," the leaflets
Seem one by one to say;
"We will wear the colors of gladness
Until we pass away,
No eyes shall see us falter;
And, before we lay it down,
We'll wear, in the sight of all the earth
The year's most kingly crown."

So, trees of the stately forest,
And trees by the trodden way,
You are kindling into glory
This soft autumnal day.
And we who gaze remember
That more than all they lost,
To hearts and trees together,
May come through the ripening frost.

—MARGARET SANGSTER.

POEM TO BE MEMORIZED:

HOW THE LEAVES CAME DOWN

"I'll tell you how the leaves came down,"
  The great tree to his children said;
"You're getting sleepy, Yellow and Brown.
  Yes, very sleepy, little Red;
  It is quite time to go to bed."

"Ah!" begged each silly, pouting leaf,
  Let us a little longer stay!
Dear Father Tree, behold our grief;
  'Tis such a very pleasant day
  We do not want to go away."

So, for just one more merry day,
  To the great tree the leaflets clung,
Frolicked and danced, and had their way
  Upon the autumn breezes swung,
  Whispering all their sports among,—

"Perhaps the great tree will forget,
  And let us stay until the spring,
If we all beg and coax and fret."
  But the great tree did no such thing;
  He smiled to hear their whispering.

"Come, children, all to bed," he cried.
  And ere the leaves could urge their prayer,
He shook his head, and far and wide,
  Fluttering and rustling everywhere,
  Down sped the leaflets through the air.

I saw them; on the ground they lay,
  Golden and red, a huddled swarm,
Waiting till one from far away,
  White bedclothes heaped upon her arm,
  Should come and wrap them safe and warm.

The great bare tree looked down and smiled;
"Good-night, dear little leaves," he said,
And from below, each sleepy child
Replied, "Good-night." Said little Red,
"It is so nice to go to bed!"

By Permission of author.—SUSAN COOLIDGE.
(Little, Brown & Co., Publishers.)

By questioning lead children to see the pictures in this poem and let each one paint the one he likes best. Commit poem.

READ AND DISCUSS:

OCTOBER'S PARTY

October gave a party; the leaves by hundreds came,
The Chestnuts, Oaks, and Maples, and leaves of every name.
The Chestnuts came in yellŏw, the Oaks in crimson dressed,
The lovely Misses Maple, in scarlet looked their best.

—SELECTED.

Why do the Leaves fall?

Let children examine leaves that are ready to fall, and lead them to discover the layer of tissue which has been built across the end of the petiole; this loosens the leaf so that only a slight breeze is necessary to take it to the ground.

The falling leaves in autumn,—the beginning of the year as far as the tree's life is concerned—should serve to remind pupils of the promise of life in the new bud.

When the leaves finish their work on the tree, the sap is withdrawn to the branches and trunk and the leaves fall to the earth and cover the seeds and roots of the grasses and flowers during the cold weather.

Ruskin says of the leaf—

"It leads a life of endurance, effort and various success, issuing in various beauty; and it connects itself with the whole previous edifice by one sustaining thread, continuing its appointed piece of work all the way from top to root."

Let children name leaves used as food by animals. Name insects that make their homes in leaves.

Study leaves related to the trees and impress the following facts: The leaves are to plants what lungs are to animals.

Where there are no trees the water from melted snow disappears too rapidly; moisture that is needed in the soil is taken away by floods.

Forests build up a wall and protect the farmers' crops.

We would have greater extremes of heat and cold if it were not for the trees.

The leaves catch the rain and hold it for a time before sending it to the earth. There are few birds where there are no trees.

The old leaves make a deep carpet in the woods and keep the ground from freezing.

Trees prevent dangerous floods. The roots and trunks stop the water that comes pouring down the hillside.

We have severe drouths in places where there are no trees.

It has been estimated that a large plant (sunflower) gives off over a quart of water a day. Estimate the amount given off by a large tree.

Make a general comparison of leaves—

Those which are widest near the base.
Those which are widest at the middle.
Those which are widest near the apex.

TERMS NEEDED IN DESCRIBING LEAVES

Leaf:—

Blade: The flattened part of the leaf.
Petiole: The stem of the leaf.
Stipules: Leaf-like parts at base of the petiole.
Venation: Net-veined, parallel-veined.

Shapes of Leaves:—

Oval, arrow-shaped, heart-shaped, and lance-shaped.
Simple leaves have but one blade.
Compound leaves have more than one blade.
Leaves deeply cut like the oak are called lobed leaves.
The base is near the petiole.
The apex is opposite the base.

Edges or Margins of Leaves:—

Entire, serrate or saw-toothed; crenate or scalloped; and dentate, with sharp teeth pointing outward.

Teach poems and songs that will appeal to the children and influence them to love this month of "painted leaves."

AUTUMN LEAVES

"Come, little leaves," said the wind one day,
"Come over the meadows with me and play;
Put on your dresses of red and gold;
Summer is gone and the days grow cold."

—SELECTED.

POEM TO BE MEMORIZED:

OCTOBER

O suns and skies and clouds of June
And flowers of June together,
Ye cannot rival for one hour
October's bright blue weather.

When loud the bumble-bee makes haste,
Belated, thriftless vagrant,
And golden-rod is dying fast,
And lanes with grapes are fragrant;

When gentians roll their fringes tight
To save them from the morning,
And chestnuts fall from satin burrs,
Without a sound of warning;

When on the ground red apples lie,
In piles like jewels shining,
And redder still, on old stone walls,
Are leaves of woodbine twining;

When all the lovely wayside things
Their white-winged seeds are sowing,
And in the fields, still green and fair,
Late aftermaths are growing;

When springs run low and on the brooks,
In idle golden freighting,
Bright leaves sink noiseless in the hush
Of woods for winter waiting.

O suns and skies and flowers of June,
Count all your boasts together,
Love loveth best of all the year,
October's bright blue weather.

—HELEN HUNT JACKSON.

Study "October."

Meaning of rival; thriftless; vagrant; etc. What did Lowell say about June? What flowers may be seen in June? in October? Do you agree with the author? Compare bumble-bee with honey-bee. Describe the gentian. Sketch the plant. Describe chestnut burrs, woodbine, etc. Math means mowing. Aftermath is the crop after the first mowing. Why do springs run dry in October? Name the beautiful white-winged things to be seen during this month. Which do you like the better, June or October? Why?

THE PAINTER

A fairy brush he must have used;
And color he has not abused;
The tints and tones are blended right—
The tracery is all in white!

The morning sun comes peeping through.
With glist'ning gleams of pink and blue,
To view the picture Jack has made
With glittering jewels all inlaid.

The Sun and Jack are mortal foes;
One treads upon the other's toes.
The hills and valleys melt, and run—
And poor Jack's work is all undone!

—MARY REDMOND.

BIRDS

Birds, birds! ye are beautiful things,
With your earth-treading feet and your cloud-cleaving wings,
Where shall man wander, and where shall he dwell—
Beautiful birds—that ye come not as well?

—*Birds and All Nature.*

Copyright, 1900, by A. W. MUMFORD.

Teacher's Preparation for Bird Lessons.—The following books will prove invaluable in bird study: Birds and Poets, Wake Robin, Citizen Bird, Bird Craft, A Bird Lover in the West, and Birds and all Nature (A Monthly Serial).

The teacher should read and re-read the loving tributes and ennobling sentiments of the poets, also: The Vision of Sir Launfal, The Birds of Killingworth, To a Water-fowl, To a Skylark, and similar classic poems.

The poet's sympathetic interpretation of bird life will foster a love for birds,—for all nature, and lead to a fuller appreciation of Wordsworth's thought,—

"Nature never did betray
The heart that loved her; 'tis her privilege,
Through all the years of this our life, to lead
From joy to joy; for she can so inform
The mind that is within us, so impress
With quietness and beauty and so feed
With lofty thoughts, that neither evil tongues,
Rash judgments, nor the sneers of selfish men,
Nor greetings where no kindness is, nor all
The dreary intercourse of daily life,
Shall e'er prevail against us, or disturb
Our cheerful faith, that all that we behold
Is full of blessings."

In the primary grades the children gladly follow where the teacher leads, thus giving her the blessed privilege of establishing a living sympathy with all God's creatures.

Bird life is wonderfully interesting and our feathered friends

SWALLOWS—*By Laux*

at all times and seasons are challenging young and old to discover their secrets. The children should be encouraged to make friends with the birds, to watch their graceful movements, and listen to their songs.

Picture the life of these beautiful little creatures, the time they spend collecting material for the nest, the ingenuity exhibited in building, care of the little bird family, bravery in defending the nest against enemies, and their joy when the young birds are ready to fly.

If the teacher is interested and enthusiastic, the pupils will catch her spirit and surprise her by their discoveries. In order that children may have the privilege of observing the birds daily, ears of corn, small boxes or sheaves of grain should be fastened to the trees near the school or home, and a dish of fresh water kept in a convenient spot where the birds may drink and bathe.

Tell interesting stories and incidents of bird life. Long, long ago, when Mother Nature gave the birds their plumage, the thrush came last and the attractive colors were all gone; the oriole had selected the orange; the canary, the yellow; the bluebird had chosen the blue; the tanager, the red, and the humming-birds and doves had monopolized the rainbow colors. The thrush looked admiringly at her friends and said, "Never mind, dear Mother, a plain brown dress is good enough for me, but give me a sweet voice, so that I can make the children happy."

Tell them about the polite bird (cedar-wax-wing) with the high head-dress, and the beautiful little points like red sealing-wax on the wings. A flock will often perch on the bare branches, stroke each other's plumage, bow, twitter, and pass choice morsels of food back and forth again and again before any one of the number can be persuaded to eat it.

In the lower grades the living bird should be studied out of

doors, and six or eight birds known and loved as a result of the first year's study may be considered good work. Ask questions that cannot be answered except by observing the birds.

What birds walk? What birds hop? What bird has a red patch on its head? Name birds that are black or nearly so. What time of the day do the birds begin to sing? How many have heard birds singing in the rain? Do they sing at night? What have you seen birds eating? Where do they sleep at night? How many have fed birds in the winter time? What bird was Celia Thaxter thinking of when she wrote "Don't you remember his glowing red breast, and his olive brown coat and his shining black eye?" Robin. What birds tell us their names? Bobwhite, whipporwill, chickadee, bobolink, pee-wee, and others.

Let children try to imagine the wonderful sights witnessed by the birds as they fly over land and sea.

BIRDS IN SUMMER

How pleasant the life of a bird must be,
Flitting about in each leafy tree;
In the leafy trees so broad and tall,
Like a green and beautiful palace hall,
With its airy chambers light and boon,
That open to sun and stars and moon;
That open to the bright blue sky,
And the frolicsome winds as they wander by.

To pass through the bowers of the silver cloud;
To sing in the thunder-halls aloud;
To spread out the wings for a wild, free flight
With the upper cloud-winds—oh, what delight!
Oh, what would I give like a bird, to go
Right on through the arch of a sunlit bow,
And see how the water-drops are kissed
Into green and yellow and amethyst!

—MARY HOWITT.

Children should be requested to report their observations from time to time. They will have many questions to ask about the birds as soon as they become really interested.

Where do the birds go in autumn? They go south where the flowers are in bloom, when we have snow and cold weather.

Why do they go? In search of food. In their new home they find the same kind of food that they had here all summer. Some birds eat vegetable food, some animal, while others prefer a mixed diet. The locality is determined by the abundance of food suited to their nature.

Will all the birds leave us? The blue jay, English sparrow, brown creeper, and several other birds remain with us all the year round. Some birds, as the chickadees, winter-wrens, tree sparrows, Bohemian wax-wings, come here from colder regions of the north to make us a visit during the winter. Some members of the great bird family are going or coming nearly all the time.

Which birds go first? Those whose food consists mostly of insects. The swifts and swallows go in August or early September. Humming-birds also go early. Robins eat animal and vegetable food and occasionally remain until we have snow.

Do they go singly or in flocks? Many birds congregate in flocks before they start, as the swallows, bobolinks, king birds, robins, and others.

What do the birds eat that remain here all winter? They find grubs hidden under the bark of trees, and seeds on the grasses above the snow.

Do they fly very high? Those that fly at night generally do, unless prevented by fogs.

Can birds fly very fast? Many birds fly a mile a minute and, if the wind is favorable, they are able to continue at that rate hour after hour. Swifts have been known to travel two hun-

dred miles an hour. Wild geese travel from twelve to fifteen hundred miles a day. It is claimed that the tiny flame-breasted humming-bird builds its nest as far north as Alaska and winters in Lower California and Mexico, traveling a distance of over two thousand miles twice a year.

HUMMING-BIRDS IN THE AMAZON REGION

It is enough to make one dumb with awe and wonderment even to contemplate the inexhaustible variety in their freaks of outward form alone, and it will be a day long to be remembered by any one who is fortunate enough to spend an hour or two within the fairy tropics of a conservatory devoted to these blossoms of the air. Here are colors and tones that are not of this world, but rather radiations borrowed from the celestial rainbow and the sunset and the pure blue sky. Here are scintillating textures woven with yellow light, and twilight purples of a hundred hues. * * * *

—GIBSON—*Highways and Byways.*

Why can some birds fly faster than others? The wings of birds that have very long journeys to take are long, pointed, and very strong, while the wings of those that fly only short distances are generally short, rounded and weak. Wild geese, ducks, and swans are first-class flyers as well as swimmers. The migration of a flock of geese is an interesting sight. A leader flies ahead at the point where the two lines of birds meet, and when he decides to change his position, a neighbor takes his place and the flock keeps in perfect order while the leaders are changing. They fly thousands of miles to build their nests in summer in northern regions.

Do the birds lose their way? Sometimes during storms it is supposed that they are not able to recognize the land marks,—rivers, coast lines, and mountains, and they often fly against high buildings, towers, or electric wires and thus meet their death. The eyes of birds magnify objects and enable them to see their land-marks when the weather is clear.

How do the young birds know where to go the first year? Bird lovers tell us that they are guided by the calls of the old birds the first year, and the next year they act as guides for other birds.

"Little bird! little bird! who'll guide thee
Over the hills and over the seas?
Foolish one! Come in the house to stay,
For I'm very sure you'll lose your way."

"Ah, no, little maiden! God guides me
Over the hills and over the sea.
I will be free as the rushing air,
And sing of sunshine every where."

—LYDIA MARIA CHILDS.

"There is a Power whose care
Teaches the way along that pathless coast,
The desert and illimitable air,
Lone wandering but not lost."

—BRYANT.

Do birds wear the same plumage all the year? Their feathers get worn by storms and by brushing against the branches of trees and they drop out one by one and are replaced by new ones. The tips of the smaller feathers give the bird its color; the breast feathers of a bluebird, for instance, are reddish only at the tips and for this reason birds often present a very different appearance during the year. Many birds are provided with more than one new suit a year. What is the color of the bobolink in spring time? in the fall?

Is the bird's body warmer than ours? The temperature of the human body is 98 degrees; that of a bird from 104 to 108 degrees.

NOTE.—Mr. Brewster, a noted ornithologist, made many interesting discoveries on the nocturnal flight of migrants at a New Brunswick light-house a few years ago. On the subject of migrations there still remains a large field for original research, many ornithologists claim.

Why is it warmer? The rapid movements of the birds through the air increases the circulation of the blood, making it warmer than that of any other animal, and the small, downy feathers covering the bird's body, prevent the heat from escaping.

How is the bird's body adapted for flight? The bird's plumage is very light; that of a large owl is said not to weigh two ounces. The shape of the body and the arrangement of the feathers (directed backwards) aid the bird in flying. The hollow bones and quill feathers are filled with air, and the air sacs extending through the body, even through the bones, are connected with the lungs. The light feathers, the expansion of the warm air and the strength of the tail and wing feathers enable the bird to move through the air with a graceful, gliding motion.

Have the birds many enemies? Yes, they have all sorts of enemies. Rats, squirrels, cats, weasels and snakes destroy a great number of eggs and young birds. Hawks, owls, crows, bluejays, shrikes, and several other birds prey upon their neighbors, and man, too, must be regarded as perhaps their worst enemy. It is estimated that the yearly slaughter of birds in America is about five millions—a million killed in one month near Philadelphia; forty thousand birds killed in a single season on Cape Cod; twenty thousand supplied to a New York dealer from one village. Why? To ornament the hats of American women. May Riley Smith says:

"What does it cost this garniture of death?
It costs the life which God alone can give;
It costs dull silence, where was music's breath;
It costs dead joy, that foolish pride may live;
Ah! life and joy and song, depend upon it,
Are costly trimmings for a woman's bonnet."

—By permission of E. P. Dutton & Co.

Do all birds build nests? The chick-a-dees, nut-hatches, brown creepers and others are satisfied with a second-hand nest. Some birds repair last year's nest, as the owl, wren, and bluebird. The cow-bird lays its eggs

in the nest of other birds; when the warblers find a strange egg in their nest they often build a new nest above the old one.

Ye have nests on the mountains, all rugged and stark,
Ye have nests in the forest, all tangled and dark;
Ye build and ye brood 'neath the cottagers' eaves
And ye sleep on the sod 'mid the bonnie green leaves;
Ye hide in the heather, ye lurk in the brake,
Ye dine in the sweet flags that shadow the lake;
Ye skim where the stream parts the orchard decked land,
Ye dance where the foam sweeps the desolate strand."

—*Birds and All Nature,* Copyright 1900, by A. W. Mumford, Chicago.

Make a special study of the domestic pigeon, or the canary, parrot, or hen, in the school-room in order to prepare the children for intelligent observation out of doors. A skeleton wire-covered box will make a nice home for the pretty pigeon until the children become better acquainted with her. Find out what they know about this meek little bird. Let them imitate the plaintive sound it makes. (Coo, coo.) Watch it drinking. It does not raise its head as other birds do. Notice its dainty steps while walking.

CHARACTER OF THE BIRD

It is an innocent, gentle bird and has always been the symbol of tenderness and devotion. Let children tell what they have observed about the nest. Both birds help in building and they take turns in sitting upon the nest. They raise several broods in one season.

Tell stories of pigeons.

FABLE

Long ago one bright day in spring many of our distinguished birds assembled in a beautiful grove to exchange compliments and welcome new arrivals from the sunny south. All at once, an unexpected visitor appeared before them. Her graceful manners, dainty ways and low,

soft voice won the approval and admiration of all the lovely company. The birds gave the pretty stranger a very cordial greeting and bestowed upon her favors unheard of in bird life previous to that day. They not only offered to assist the new comer in the choice of a desirable location, but promised to give her lessons in the art of nest building.

The swallows tried to persuade her that they had invented the most wonderful nest of all the birds, the orioles described the beauty of a swinging cradle in an elm tree, the meadow-lark assured her that for safety and ingenuity no nest could be compared with her's, the woodpecker offered to choose the finest tree in the grove and show her how to make an ideal nest. The little pigeon listened attentively to all her friends, but said with a toss of her pretty head, "I am very thankful to you all, but I understand the art of nest building far better than any of you." Of course, the birds were very much offended and they all flew away and left her there alone. No doubt she was sorry for her independence, because she has every reason to be ashamed of her nest. Her relatives (mourning dove and passenger pigeon) need instruction in the art of nest building as well as our little favorite.

Call attention to the plumage so difficult to describe,—sometimes bluish, slate-colored, white, rainbow colors; the bright round eyes; the grooved bill; nostrils in the upper bill.

Notice the short, slender legs covered with tough skin, the four toes, three in front and one behind, and the strong, sharp claws.

Call attention to the fluttering noise made by striking the long, pointed wings in flight.

Let children learn the names of the parts of a bird,—crown, beak, throat, breast, wings, tail, claws, etc.

The carrier, or messenger pigeon has a very interesting history. It has been trained to carry messages in a short time over long distances. The training is begun when the bird is very young by taking it a short distance from home and setting it free. It soars upward until it determines the right direction and then returns to its cote. Day after day it is taken in the same direction from its home, each time a little

further, until it becomes very familiar with the route it is to travel.

A message is written on the finest paper, placed in a cylinder made of aluminum and is attached to one of the tail feathers. From forty to fifty miles an hour is about the average speed of the messenger.

THE DOVE AND THE WOODPECKER

A FABLE

A dove and a woodpecker had been visiting a peacock. "How did you like our host?" asked the woodpecker, after their visit. "Is he not very disagreeable? His vanity, shapeless feet, and his harsh voice are unbearable. Don't you think so?" "Indeed I had no time," said the gentle dove, "to notice these things; I was so occupied with the beauty of his head, the gorgeousness of his colors, and the majesty of his train."

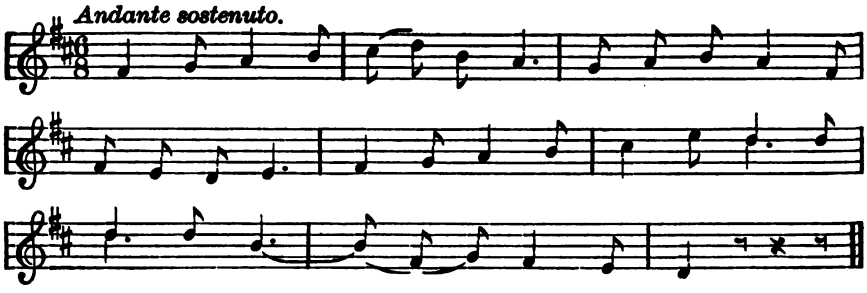
Tell children one of the legends connected with the Doves of Venice.

Centuries ago this "City of the Sea" was nearly conquered by enemies. Doves arrived with messages just in time to save the city and ever since the doves have been protected and loved by the people. Strangers enjoy watching them in the beautiful St. Marco Square near the grand cathedral.

High on the top of an old pine tree
Broods a mother-dove with her young ones three.
Warm over them is her soft downy breast,
And they sing so sweetly in their nest.
"Coo," say the little ones, "Coo," says she.
All in their nest on the old pine-tree.

NOTE.—The name "dove" and "pigeon" are not quite synonymous, but because "dove" is so commonly used in literature and it is so nearly correct, "Howe" advocates the use of the term dove in primary grades.

Fast grow the young ones, day and night,
Till their wings are plumed for a longer flight;
Till unto them at last draws nigh
The time when they all must say "Good-bye."
Then "Coo," say the little ones, "Coo," says she,
And away they fly from the old pine-tree.



BIRDLING'S GOOD-NIGHT TO THE FLOWERS

Shadows creep along the sky,
Birdies now must homeward fly;
Hear the songs they sing to greet
All their friends—the flowers sweet.

Good-night darling mignonette,
Good-night little violet;
Good-night pinks and four o'clock,
Good-night, homely holly-hock!

Good-night lily; good-night rose;
Good-night every flower that blows;
Thank you for your lovely bloom,
Thank you for your sweet perfume.

From *Songs for Little Children* by Eleanor Smith. By permission of Milton Bradley Co. and Thomas Charles, Chicago, Publishers.

Birds are divided into families according to their form, habit, and manner of obtaining food.

Perching Birds, Ex.—Robin, oriole.

Climbing Birds, Ex.—Woodpecker and parrot.

Scratching Birds, Ex.—Hen, pigeon.

Wading Birds, Ex.—Crane, heron. Swimming Birds, Ex.—Goose and duck.

Running Birds, Ex.—Ostrich. Preying Birds, Ex.—Eagle.

Find out the characteristics of each family.

DUCK

A type of water birds compared with the hen, or some other bird previously studied.

Call attention to the boat shaped body of the duck, the legs strong and short and placed far back on the body.

The hen's rounded heavy body. What shape better adapted for swimming? What does the duck eat? How obtain food? What is the advantage of the broad, shovel shaped bill with its rough plate along the sides? Serves as a strainer and enables the duck to retain the food and reject mud, etc. What does the hen eat? How does she get her food? Examine the strong membrane between the toes of the duck, adapted for wading, the strong, sharp claws of the hen, adapted for scratching.

Plumage of duck. Sometimes a dark, glossy green, reddish brown, beautiful soap-bubble colors. Why so glossy? The supply of oil in the oil gland is sufficient to keep the feathers saturated with oil. (Waterproof.) Heavy coat of soft down next to body. Why? Protection against changes of temperature in air and water. Compare with hen.

MAKE A SPECIAL STUDY OF THIS BEAUTIFUL POEM:

ODE TO A WATER-FOWL

Whither 'midst falling dew,
While glow the heavens with the last steps of day,
Far, through their rosy depths, dost thou pursue
Thy solitary way?

Vainly the fowler's eye
Might mark thy distant flight to do thee wrong,
As, darkly painted on the crimson sky,
Thy figure floats along.

Seek'st thou the plashy brink
Of weedy lake, or marge of river wide,
Or where the rocky billows rise and sink
On the chafed ocean side?

There is a Power whose care
Teaches the way along that pathless coast,
The desert and illimitable air,
Lone wandering, but not lost.

All day thy wings have fanned,
At that far height, the cold, thin atmosphere,
Yet stoop not, weary, to the welcome land,
Though the dark night is near.

And soon that toil shall end.
Soon shalt thou find a summer home, and rest,
And scream among thy fellows; reeds shall bend,
Soon o'er thy sheltered nest.

Thou'rt gone; the abyss of heaven
Hath swallowed up thy form; yet, on my heart,
Deeply has sunk the lesson thou hast given,
And shall not soon depart.

He, who, from zone to zone,
Guides through the boundless sky thy certain flight,
In the long way that I must tread alone,
Will lead my steps aright.

—WILLIAM CULLEN BRYANT.

How can we tell when the poet saw the bird? The appearance of the sky? Number of birds? Why useless for the fowler to try to harm the bird? Meaning of plashy brink? Marge? Chafed? Might the bird seek a home in a forest? Why is the first letter in Power a capital? Meaning of path-

less? Illimitable? Abyss of heaven? Boundless? What lines show confidence in God? Paint the pictures suggested by the following lines:

"As darkly painted on the crimson sky
Thy figure floats along."

"Reeds shall bend
Soon o'er thy sheltered nest."

What is the message contained in the poem?

STUDY OF POEM

Children have studied "The Sparrows," "The Poppy Seed," and visited in imagination the White and Appledore Islands.

Review the story of Celia Thaxter's childhood days. Her father was the keeper of an island light-house on the Atlantic coast. Celia loved the stormy ocean, the seagulls, the sandpipers—everything connected with her home. In the following poem she has given us a picture of herself and one of her dear little friends.

POEM TO BE MEMORIZED AFTER THOUGHTFUL DISCUSSION:

THE SANDPIPER

"Across the lonely beach we flit,
One little sandpiper and I,
And fast I gather bit by bit,
The scattered driftwood bleached and dry,
The wild waves reach their hands for it;
The wild wind raves, the tide runs high,
As up and down the beach we flit,
One little sandpiper and I.

"Above our heads the sullen clouds
Scud black and swift across the sky.
Like silent ghosts in misty shrouds
Stand out the light-houses high.
Almost as far as eye can reach
I see the close-reefed vessels fly,
As fast we flit along the beach,
One little sandpiper and I.

"I watch him as he skims along
Uttering his sweet and mournful cry;
He starts not at my fitful song,
Or flash of fluttering drapery,
He has no thought of any wrong;
He scans me with a fearless eye.
Staunch friends are we, well tried and strong,
The little sandpiper and I.

" 'Comrade, where wilt thou be to-night
When the loosed storm breaks furiously?
My driftwood fire will burn so bright!
To what warm shelter canst thou fly?
I do not fear for thee, though wroth
The tempest rushes through the sky;
For are we not God's children both,
Thou, little sandpiper, and I?' "

—CELIA THAXTER.

Teacher, read poem to children. Show pictures of ocean vessels, light-house and sandpiper. Describe bird. Explain close-reefed, beach, staunch, etc. Teacher, read poem again and help children to see the pictures in each stanza. Group expressions that suggest fear and loneliness; expressions that suggest hope and confidence. Sketch a picture you can see in second stanza. Repeat the last stanza of Bryant's poem "The Water-fowl." Do you like this poem as well as "The Sandpiper"? Give reasons for your choice.

THE GRAY SQUIRREL

This handsome, nimble, little fellow is perhaps the most interesting member of the large family of rodents.

In studying an animal, its manner of life in its native haunt should be the first thing observed. Ask questions to guide children in their outdoor study.

When and where did you see the squirrel? Describe his movements. How does he run up a tree? How come down?

PIPER AND NUTCRACKERS—*By Landseer*

Compare with the cat in this respect. What does he eat? How does he carry his food? Where does he live? Describe his nest. When running, in what position does he carry his tail? Imitate the noise he makes.

If teacher and pupils are so situated that it is impossible to study the squirrels in their own natural environment procure one alive in a revolving cage for study in the school-room. One of the pupils may have a tame squirrel, which he will be glad to bring to school for a week or so.

Children, watch the squirrel in his cage and find out his way of eating, drinking, and bathing. Notice his teeth. In the front of his mouth he has four long, chisel shaped teeth, two in the upper jaw and two in the lower. For grinding he has strong, broad back teeth.

How does he hold the nut? How does he eat it? He seems to like fruit, grain, buds, and cones as well as nuts. Observe the squirrel when asleep.

Body.—The long slender body is covered with two coats of soft fur. The coat next to the body is very compact and warm; the hair on the outer coat is long and it determines the color. The gray squirrel is variable in color, ranging from very light gray to black. He has bright, round eyes, ears of medium size, and very long whiskers. The hind legs are longer than the front ones. The fore paws are each provided with four toes and a thumb, while the hind paws have five toes each. The long bushy tail is used as a rudder in jumping and it also serves to keep the body warm during the winter.

Children notice that the squirrel often hides food under leaves, bark, or other objects in the cage.

Habits when free.—The squirrel selects a deep hollow in a decayed tree, lines it with moss and leaves, and sleeps there securely the greater part of the time in winter. He stores his

food in autumn; sometimes hiding it in old trees near his home and sometimes burying a portion in the earth; occasionally he wakes up during the winter and runs out and finds something to eat. His teeth continue to grow as long as he lives and he must keep them worn down by gnawing.

THE SQUIRREL

In the joy of his nature he frisks with a bound
To the topmost twigs, and then to the ground;
Then up again, like a winged thing,
And from tree to tree with a vaulting spring;
Then he sits up aloft, and looks waggish and queer,
As if he would say, "Ay, follow me here!"
And then he grows pettish, and stamps his foot;
And then independently cracks his nut. * *

—MARY HOWITT.

COMPARE THE GRAY, WITH THE RED SQUIRREL.

INDIAN CORN

The children above the first grade have been watching with great interest the growth of the corn they planted in early spring. Before the close of the term their observations should be summed up. Teacher, direct attention to a field of corn, if convenient. Let children tell what they know about the manner of planting corn, its cultivation, and the soil best adapted for its growth.

Study of the Plant as a Whole

What is the average height of the stem? Pupils measure.

How many joints in the stalk?

Are they alike? Examine the roots. How are the leaves arranged on the stem?

Stem.—Tall, straight, smooth, lower nodes prominent; pithy inside the stalk.

Roots.—Numerous, tough, and fibrous; strong roots branching from the lowest nodes give the plant a broader base and

help to support the stalk with its wealth of leaves and golden grain.

Leaves.—Long, narrow, parallel-veined; spread out from the joints in graceful curves.

Flowers.—Two kinds,—the tassel, a tall branched spike at the top of the stem containing only stamens; bunches of silk in the axils of the lower leaves,—the styles of the pistillate flowers.

Have children picture the corn stalk.

Pollen must fall on the silk in order to mature the corn,—it may fall from the tassel above, or it may be carried by the wind from another plant.

Have children examine the silky threads, and find out where they are attached to the kernels.

Has each kernel a thread? Observe arrangement of the kernels on the cob. How many rows do you find?

Uses.

The kernels yield "Oswego," or corn starch.

The kernels ground, form Indian meal.

The stalks are used for fuel and in making baskets.

The husks are used in packing fruits, in stuffing saddles, beds and chairs, and in the manufacture of paper.

History. . . . . . .

Early writers describe the corn of Peru and Chili.

Maize is probably a native of Mexico.

Early explorers of America found it cultivated by the Indians.

It was taken by Columbus to Spain in 1520.

Edward Everett said:

"Drop a grain of California gold into the ground, and there it will lie unchanged to the end of time, the clods on which it falls not more dead and lifeless. Drop a grain of our gold, of our blessed gold, into the ground and lo! a mystery. In a few

days it softens, it swells, it shoots upwards; it is a living thing. It is yellow itself, but it sends up a delicate spire which comes peeping, emerald green, through the soil; it expands to a vigorous stalk; revels in the air and sunshine; arrays itself more glorious than Solomon in its broad fluttering leafy robes, * * still towers aloft, spins its verdant skeins of vegetable floss, displays its dancing tassels, surcharged with fertilizing dust, and at last ripens into two or three magnificent batons, each of which is studded with a hundred grains of gold, every one possessing the same wonderful properties as the parent grain."

Literature.

"Feast of Mondamin"—from Song of Hiawatha, and "Maize, the Nation's Emblem."—*Houghton, Mifflin & Co.*

Not forgotten nor neglected
Was the grave where lay Mondamin
Sleeping in the rain and sunshine * * *
* *

Day by day did Hiawatha
Go to wait and watch beside it;
Till at length a small green feather
From the earth shot slowly upward,
Then another and another,
And before the summer ended
Stood the maize in all its beauty
With its shining robes about it
And its long, soft yellow tresses. * * *

(Mondamin was the Indian name for maize, or Indian corn.)

Teacher, read the description of "This New Gift of the Great Spirit," and children, memorize after discussion.

THE FARMER AND HIS SONS.

The farmer was industrious and wealthy; the sons were lazy and thoughtless. "Father, do tell us where to find your treasure," they said; "My treasure lies in the cornfield," answered the father. The boys went

to work and dug the fields day after day to find the pot of gold. They never found it, but the field yielded a fine crop of corn. This was the father's wealth.

READ AND DISCUSS THE FOLLOWING POEM:

MAIZE FOR THE NATION'S EMBLEM

Upon a hundred thousand plains
  Its banners rustle in the breeze,
O'er all the nation's wide domains,
  From coast to coast betwixt the seas.

It storms the hills and fills the vales,
  It marches like an army grand,
The continent its presence hails,
  Its beauty brightens all the land.

Far back through history's shadowy page
  It shines a power of boundless good,
The people's prop from age to age,
  The one unfailing wealth of food.

God's gift to the New World's great need,
  That helps to build the nation's strength,
Up through beginnings rude to lead
  A higher race of men at length.

How straight and tall and stately stand
  Its serried stalks upright and strong!
How nobly are its outlines planned!
  What grace and charm to it belong!

What splendid curves in rustling leaves!
  What richness in its close-set gold!
What largeness in its clustered sheaves,
  New every year, though ages old!

America, from thy broad breast
  It sprang, beneficent and bright,
Of all the gifts from heaven the best,
  For the world's succor and delight.

Then do it honor, give it praise!
A noble emblem should be ours:—
Upon thy fair shield set thy Maize,
More glorious than a myriad flowers.

And let the states their garlands bring,
Each its own lovely blossom-sign;
But leading all, let Maize be king,
Holding its place by right divine.

—CELIA THAXTER.

THANKSGIVING DAY

The autumn nature lessons and literature have enabled the teacher to instill into the hearts of the children true feelings of gratitude for the many blessings they enjoy.

Discuss the following topics: The Pilgrims Leaving England; The Pilgrims in Holland; The Voyage of the Mayflower; The Two Children—Peregrine White and Oceanus Hopkins; The Landing; etc. Show pictures of the life of that time.

THANKSGIVING DAY

"Over the river and through the wood
To grandfather's house we'll go;
The horse knows the way
To carry the sleigh
Through the white and drifted snow.

Over the river and through the wood,
Trot fast, my dapple gray!
Spring over the ground
Like a hunting hound!
For this is Thanksgiving Day. * * *

—SELECTED.

Teach—"Montgomery's Hymn," Lucy Larcom's "Thanksgiving," and similar selections.

THE LANDING OF THE PILGRIMS

The breaking waves dashed high.
On a stern and rock-bound coast;
And the wood against a stormy sky
Their giant branches tossed;
And the heavy night hung dark
The hills and waters o'er,
When a band of exiles moored their bark
On the wild New England shore.

Not as the conqueror comes,
They, the true hearted came;
Not with the roll of the stirring drums
And the trumpet that speaks of fame;
Not as the flying come,
In silence and in fear;
They shook the depths of the desert gloom
With their hymns of lofty cheer.

Amidst the storm they sang,
And the stars heard and the sea;
And the sounding aisles of the dim woods rang
With the anthems of the free.
The ocean eagle soared
From his nest by the white waves foam;
And the rocking pines of the forest waved—
This was their welcome home.

There were men with hoary hair
Amidst that Pilgrim band;
Why had they come to wither there,
Far from their childhood's land?
There was woman's fearless eye,
Lit by her deep love's truth;
There was manhood's brow serenely high
And the fiery heart of youth.

What sought they thus afar?
Bright jewels of the mine?
The wealth of seas, the spoils of war?
They sought a faith's pure shrine.
Ay, call it holy ground,
The soil where first they trod!
They have left unstained what there they found
Freedom to worship God!

—Felicia Hemans.

By reading, re-reading and questioning help children to catch the spirit of Mrs. Heman's poem.

THANKSGIVING HYMN

(TUNE—"AMERICA.")

The God of harvest praise;
In loud thanksgiving raise
Heart, hand and voice,
The valleys laugh and sing,
Forests and mountains ring,
The plains their tribute bring,
The streams rejoice.

Then God of harvest praise;
Hands, hearts and voices raise,
With sweet accord;
From field to garner throng,
Bearing your sheaves along,
And in your harvest song,
Bless ye the Lord.

—JAS. MONTGOMERY.

A THANKSGIVING

For the wealth of pathless forests,
Whereon no axe may fall;
For the winds that haunt the branches;
The young bird's timid call;
For the red leaves dropped like rubies
Upon the dark green sod;
For the waving of the forests,
I thank Thee, O my God!

For the sound of waters gushing
In bubbling beads of light;
For the fleets of snow-white lilies
Firm-anchored out of sight;
For the reeds among the eddies;
The crystal on the clod;
For the flowing of the rivers,
I thank Thee, O my God!

For the rosebud's break of beauty
Along the toiler's way;
For the violet's eye that opens
To bless the new-born day;

For the bare twigs that in summer
  Bloom like the prophet's rod;
For the blossoming of flowers,
  I thank Thee, O my God!

For the lifting up of mountains,
  In brightness and in dread;
For the peaks where snow and sunshine
  Alone have dared to tread;
For the dark of silent gorges,
  Whence mighty cedars nod;
For the majesty of mountains,
  I thank Thee, O my God!

For the splendor of the sunsets,
  Vast mirrored on the sea;
For the gold-fringed clouds that curtain
  Heaven's inner mystery;
For the molten bars of twilight,
  Where thought leans, glad, yet awed;
For the glory of the sunsets,
  I thank Thee, O my God!

For the earth, and all its beauty;
  The sky, and all its light!
For the dim and soothing shadows
  That rest the dazzled sight;
For unfading fields and prairies,
  Where sense in vain has trod;
For the world's exhaustless beauty,
  I thank Thee, O my God!

For an eye of inward seeing;
  A soul to know and love;
For these common aspirations,
  That our high heirship prove;
For the hearts that bless each other
  Beneath Thy smile, Thy rod;
For the amaranth saved from Eden,
  I thank Thee, O my God!

For the hidden scroll, o'erwritten
With one dear Name adored;
For the Heavenly in the human;
The Spirit in the Word;
For the tokens of Thy presence
Within, above, abroad;
For Thine own great gift of Being,
I thank Thee, O my God!

—LUCY LARCOM.

Teacher, read the entire poem and then read it stanza by stanza. Children describe pictures. Count the blessings named in each stanza. Meaning of eddies? rubies? scroll? mystery? aspirations? Commit sixth, seventh and eighth stanzas.

CHILDREN MEMORIZE POEM AFTER DISCUSSION.

NOVEMBER

The leaves are fading and falling,
The winds are rough and wild,
The birds have ceased their calling,
But let me tell you, my child,

Though day by day, as it closes,
Doth darker and colder grow,
The roots of the bright red roses
Will keep alive in the snow.

And when the winter is over,
The boughs will get new leaves,
The quail come back to the clover,
And the swallow back to the eaves.

The robin will wear on his bosom
A vest that is bright and new,
And the loveliest way-side blossom
Will shine with the sun and dew.

The leaves to-day are whirling,
The brooks are all dry and dumb,
But let me tell you, my darling,
The spring will be sure to come.

There must be rough, cold weather,
  And winds and rains so wild;
Not all good things together
  Come to us here, my child.

So, when some dear joy loses
  Its beauteous summer glow,
Think how the roots of the roses
  Are kept alive in the snow.

—ALICE CARY.

Why are the leaves falling? Why have the birds ceased calling? Even though the days grow darker and colder what are we sure of? What will happen when the winter is over? Name way-side blossoms to be seen this month. Find lines that tell what happens in November. Describe pictures you like best.

MEMORIZE "NOVEMBER."

* * *

Each day I find new coverlids
Tucked in, and more sweet eyes shut tight;
Sometimes the viewless mother bids
Her ferns kneel down full in my sight;
I hear their chorus of "good-night,"
And half I smile and half I weep,
Listening while they lie "down to sleep."

—HELEN HUNT JACKSON.

By permission of and special arrangement with Little, Brown & Co.

Meaning of coverlids. Name "eyes" (flowers) that close in November. Meaning of "viewless mother." Why half smile and half weep?

The year has lost its leaves again,
  The world looks old and grim;
God folds his robe of glory thus,
  That we may see but Him.

—ALICE CARY.

CHAPTER III

WINTER NATURE STUDY

THE EVERGREENS

An acquaintance with the evergreens, our most beautiful winter trees, should awaken lofty ideals, strong feelings and a desire to discover the secret of their loveliness.

Preparation.—Read and discuss with children "How the Leaves Came Down." What did the bare tree say after sending the red and yellow leaves to the earth? What trees did not send their leaves away? Tell children we must discover some of the evergreens' secrets.

Field Lesson.—White Pine. Direct attention to the tree as a whole and let children compare it in a general way with the maple studied last autumn.

Emphasize symbolism and reverently lead the children to associate the pine and its relatives with the sweet story of the Christ-Child and his message of peace and love to men.

O, Christmas tree! O, Christmas tree!
A story sweet you tell to me;
You tell of that best gift to men
The Christ-Child born at Bethlehem.

O, Christmas tree! O, Christmas tree!
Your branches green I love to see;
Though years may pass and we grow old,
Your blessed tale will still be told.

—LUCY WHEELOCK.

Make a special study of the White Pine and contrast it with the Balsam Fir and the Hemlock.

The pine tree has sheltered and fed many birds and squirrels and prepared many choice gifts for man's use.

Tell children that this tall pine was once a tiny seedling. Picture some of the struggles of its early life after leaving its brown cradle in the tree, its efforts to get a foothold, the storms that it witnessed year after year. Picture its victories in bringing so much beauty to the earth in its rich, green dress; also in its mantle of spotless white after a snow-storm. Let children close their eyes and see the picture Lowell gives us.

"Every pine, and fir, and hemlock
Wore ermine, too dear for an earl,
And the poorest twig on the elm-tree
Was ridged inch deep with pearl."

A lively interest and a close sympathy with the pines will lead to many interesting discoveries. Visit the trees frequently with pupils, not to examine for them, but to direct their senses. Children will not forget the facts revealed by the tree itself.

Trunk.—Direct attention to the central shaft growing upwards, straight as an arrow. What a fine flag-staff it would make! The white pine is the tallest and most stately of all our cone-bearing trees. Let children examine the bark. It is smooth and reddish green or brown on young trees. Search for gum, moss, and lichens.

Read or tell the story of "The Amber Beads" by Jane Andrews.

Branches.—Let children show by extending their arms the horizontal branches whorled on the trunk and shortest toward the top. Direct attention to a group of trees if convenient. Visit in imagination the home of the pines. Show pictures and read for children, "By the Shores of Gitche Gumee."—Hiawatha.

Emphasize the beauty of a pine forest. The great, reddish-brown trunks pointing heavenward always, and supporting a roof of deep, restful green; the carpet of needles and cones, soft yellowish-brown and gray with an occasional touch of some bright color; the fragrance, the silence, the dim light and

the ceaseless murmuring of the wind through the needles, all combine to suggest feelings of reverence.

Leaves.—Compare shape and color of needles with leaves of maple and oak studied in autumn. Observe arrangement on branches, length of needles, and the number in a group. The soft, slender, bluish-green leaves from three to five inches long, grouped in bundles, five in a group, these bundles growing from all sides of the twigs.

The foliage is indeed beautiful.

> If Mother Nature patches the leaves of trees and vines,
> I'm sure she does her darning with the needles of the pines;
> They are so long and slender and somewhere in full view,
> She has her threads of cobweb and her thimble made of dew.
>
> —Wm. H. Payne.

Cones or Seed Cradles.—Talk with pupils about the seeds and fruit of trees previously studied. What kind of seed cradle has the oak? The chestnut? Observe arrangement of seed cradles on pines, generally near the top of the trees and near the ends of the branches. Children sing "Rock-a-by Baby on the Tree Top." The cones are from four to six inches long, slightly curved, and have strong, woody scales. Compare old cones with this year's growth. Why are the doors wide open in the old cones? The pine sent some of her children away to find new homes. Why can we not open all the cones easily? The gummy resin keeps the doors closed so that the seeds cannot get out until they are ripe. The cones mature in autumn of the second year, discharge seeds in September, and fall during the winter and spring. Find seeds in pairs at the base of the cone. Find out how many pairs of brown wings may fly away from each cradle.

Let children plant a seed and see how the tips of the needles are held together by a little cap. When the seed-cap disappears the five needles spread out. The seedlings are very delicate and must be protected from the wind and the sun.

Let children search for cones beautifully marked and carved. Tell them that sculptors noticed this beauty long ago and in many of the great cathedrals of the world we see them copied in stone and choice woods. How many beautiful patterns the Creator has given his children in trees and flowers alone!

We are told in a legend that once the pine lived on an island home and learned to sing many beautiful songs while listening to the ocean waves as they rose and fell year after year, and that this accounts for the strains of sadness we often hear while visiting the pines. The pine grosbeak, many warblers, and other birds visit the tree and sing their sweetest songs, but the pine cannot forget its island home.

What advantage has the pine as a winter tree over maples and elms? The snow sifts through the needles and enables the tree to brave most successfully the strong winds, even on the mountains.

Uses.—It contributes in so many ways to man's comfort and happiness that it is often referred to as a symbol of benevolence. It beautifies the earth when other trees are bare. The fragrance of the pines tells us of wonderful things hidden under the bark. It is one of our most valuable timber trees. The wood is compact, straight grained, and takes a high polish. It is used for building purposes, masts of ships, toys, and numberless other things. Squirrels and birds eat the seeds.

Take children on an imaginary journey to a pine forest and see the men at work cutting down the trees, hauling them to the river, and in the spring when the ice has disappeared, see the great raft floating down the river to the saw mill. What will become of them?

Children, sketch a branch containing cones and needles.

Summarize by asking a few questions. What reasons can you give why the pine is so well liked by us all? Compare the

white pine with the maple. Make the questions broad enough to include several answers.

Burroughs says in "Signs and Seasons": "How friendly the pine-tree is to man,—so docile and available as timber, and so warm and protective as shelter! Its balsam is salve to his wounds, its fragrance is long life to his nostrils; an abiding perennial tree, tempering the climate, cool as murmuring waters in summer and like a wrapping of fur in winter."

"Who shall reckon our debt to the pine? It builds us roofs; no other keeps out the sun so well. It spreads a finer than Persian mat under our feet; provides for us endless music and a balsam of healing in the air; then, when it finds us in barren places where bread is hard to get, it loads itself down with cones full of a sweet and wholesome food, and at last in its death, it makes our very hearth-stones ring with its resonant song of cheer and mirth."—HELEN HUNT JACKSON. *From Hide-and-Seek Town.* By permission Little, Brown Co. Copyrighted.

BALSAM FIR

This cone-shaped evergreen attains a height of about sixty feet. The bark is gray and smooth and is marked by blisters, from which clear resin is obtained. Canada Balsam, as it is called, is considered very valuable for its healing properties. The aromatic perfume is one of the distinguishing features of this evergreen. Balsam pillows are made from its leaves. The tree is exceedingly attractive in form and foliage. The needles are about three-fourths of an inch long, deep green and shining above and silver color below. Flowers in May and June. The cones are cylindrical, purple in color, two to four inches long, and are erect in rows on the branches.

HEMLOCK

This is the most graceful and ornamental of all the evergreens. The bark is used for tanning leather. The wood is coarse grained and is valuable only for rough boarding. The flat leaves are a deep lustrous green above, with a delicate white tint beneath; the tips of the bright green sprays are yellow green and resemble dainty tassels. The cones are bright reddish brown and are about an inch long. The branches are slender and heavily clothed with drooping foliage.

O, hemlock tree! O, hemlock tree! how faithful are thy branches!
Green not alone in summer time,
But in the winter's frost and rime!
O, hemlock tree! O, hemlock tree! how faithful are thy branches!
—H. W. LONGFELLOW.

Compare the White Pine with the Hemlock.

CHRISTMAS THOUGHTS

Christmas is very sacred and should be approached with reverence. There is no song that was ever sung or story that was ever told that brings such happiness as does the Christmas song and story.

Love, the ruling spirit of the season, should cause the child's best impulses to assert themselves in action, and influence him to look forward to Christmas as a day of great rejoicing, because of his giving, rather than receiving. Tell him why we give.

Christmas is a solemn time,
Because beneath the star,
The first great Christmas gift was given
To all men near and far.
—SELECTED.

By poem, picture, song, and story arouse the feeling of joy at Christmas time, because of the good tidings of the birth of a Redeemer.

Tell of the long ago Christmas made glorious by angelic

messengers, the wonderful lights from Heaven and the glorious song of praise to be re-echoed till the end of time.

This story of Bethlehem is one of which the world never wearies and should be told in a way that will enable the children to absorb something of the meaning of the "Light of the World" and "Love, the Greatest Gift."

O'er hill and vale, through wood and dale,
Ring out the tidings sweet again:
"Be glad; rejoice in heart and voice;
Glory to God, and peace to men."
No room within the way-side inn
Was there for Him, the Christ, the King,
But we, who know the debt we owe,
Our hearts to Him in welcome bring.
O, Babe most dear, our pleadings hear;
Dwell Thou within our lives; and be
The Light and Goal of heart and soul,
In time and through eternity.
May word and thought, and fight hard-fought
The glory of Thy name increase,
And swell the strain of glad refrain:
"On earth, to men, good will and peace!"

Donahue Magazine.—AMEDEUS.

CHRISTMAS

The moon that now is shining
In skies so blue and bright,
Shone ages since on shepherds
Who watched their flocks by night.
There was no sound upon the earth,
The azure air was still.

When lo! a white winged angel,
The watchers stood before,
And told how Christ was born on earth,
For mortals to adore;

He bade the trembling shepherds
Listen, nor be afraid,
And told how in a manger
The glorious child was laid.

When suddenly in the Heavens
Appeared an angel band,
(The while in reverent wonder
The Syrian shepherds stand.)
And all the bright host chanted
Words that shall never cease,
Glory to God in the highest,
On earth good-will and peace!

—ADELAIDE PROCTOR.

THE THREE KINGS

Who are these that ride so fast? They are Eastern monarchs three,
Who have laid aside their crowns, and renounced their high degree;
The eyes they love, the hearts they prize, the well known voices kind,
Their peoples' tents, their native plains, they've left them all behind.
The very least of faith's dim rays beamed on them from afar,
And that same hour they rose from off their thrones to track the star;
They cared not for the cruel scorn of those who called them mad;
Messia's star was shining, and their royal hearts were glad.
Oh glory be to God on high for these Arabian kings,
These miracles of royal faith, with Eastern offerings;
For Gaspar and for Melchior and Balthazzar, who from far,
Found Mary out and Jesus by the shining of a star!

—FREDERICK W. FABER.

Dickens' "Christmas Tree" will suggest many beautiful pictures.

NOTE.—The teacher should make special preparation for this most important of all stories by studying Bible chapters in which Christ's birth is recorded—pictures of "Holy Night," "The Shepherds," "The Wise Men" and the geography of the Holy Land.

A CHRISTMAS TREE

* * * * Straight in the middle of the room, cramped in the freedom of its growth by no encircling walls or soon-reached ceiling, a shadowy tree arises; and looking up into the dreamy brightness of its top I look into my youngest Christmas recollections! * * * * But hark! The Waits are playing, and they break my childish sleep! What images do I associate with the Christmas music, as I see them set forth on the Christmas Tree? Known before all the others, keeping far apart from all the others, they gather round my little bed. An angel speaking to a group of shepherds in a field; some travelers, with eyes uplifted, following a star; a baby in a manger; a child in a spacious temple, talking with grave men; a solemn figure, with a mild and beautiful face, raising a dead girl by the hand, again, near a city gate, calling back the son of a widow, on his bier, to life; a crowd of people looking through the open roof of a chamber where he sits, and letting down a sick person on a bed, with ropes; the same in a tempest, walking on the water to a ship; again on a sea-shore, teaching a great multitude; again with a child upon his knee, and other children round; again, restoring sight to the blind, speech to the dumb, hearing to the deaf, health to the sick, strength to the lame, knowledge to the ignorant; again, dying upon a cross, watched by armed soldiers, a thick darkness coming on, the earth beginning to shake, and only one voice heard. "Forgive them, for they know not what they do!" * * * * A moment's pause, O vanishing tree, of which the lower boughs are dark to me as yet, and let me look once more! I know there are blank spaces on thy branches, where eyes that I have loved have shone and smiled; from which they are departed. But, far above, I see the Raiser of the dead girl and the widow's son; and God is good! * * * * O may I, with a gray head, turn a child's heart to that figure yet, and a child's trustfulness and confidence. * * * *

Teacher read, explain and lead children to describe the scenes associated with the Christmas music. Let each one tell which scene he likes best. Show pictures: Holy Night—Correggio, Christmas Chimes—Blashfield, Madonnas—Raphael, Shepherds—Plockhorst, Nativity—Lerolle.

HOLY NIGHT—*By Antonio Allegri* (*Correggio*)

CORREGGIO'S HOLY NIGHT.

An old German Christmas carol interprets this beautiful picture.

Correggio has been called a painter of "light and space and motion." Compare "Holy Night" with the word picture.

Silent night! Holy night!
All is calm, all is bright!
Round you, virgin mother and child;
Holy infant, so tender and mild,
Sleep in heavenly peace.

Silent night! Holy night!
Shepherds quake at the sight,
Glories stream from Heaven afar,
Heavenly hosts sing alleluia,
Christ the Savior is born!

Silent night! Holy night!
Son of God, love's pure light
Radiant beams from Thy holy face
Jesus, Lord, at Thy birth.

Mary and Joseph had come to Bethlehem to pay the taxes exacted by the ruler. "There was no room for them in the inn" because so many people had come to the town on the same mission. An angel made known the birth of Christ to some shepherds on the neighboring hill-side. Suddenly there was with the angel a multitude of the heavenly host praising God. The shepherds, guided by the star, hurried to Bethlehem, where they found the Divine Child wrapped in swaddling clothes and lying in a manger. In the picture you see the shepherds paying homage to the new-born King.

Observe the bright light in the center of the picture, the surrounding darkness and the beautiful spiritual face of the mother. The Holy Child is the source of illumination in the picture. The symbolic meaning is plain—"Christ is the Light of the World." When Titian saw Correggio's paintings he declared that if he were not Titian he would wish to be Correggio.

LEARN THIS POEM BY HEART:

LITTLE TOWN OF BETHLEHEM

O, little town of Bethlehem!
How still we see thee lie;
Above thy deep and dreamless sleep
The silent stars go by:
Yet in thy dark street shineth
The everlasting Light;
The hopes and fears of all the years
Are met in thee to-night.

How silently, how silently,
The wondrous gift is given;
So God imparts to human hearts
The blessings of His heaven,
No ear may hear His coming,
But in this world of sin,
Where meek souls will receive Him still
The dear Christ enters in.

For Christ is born of Mary,
And gathered all above,
While mortals sleep, the angels keep
Their watch of wondering love.
O, morning stars together
Proclaim the holy birth!
And praises sing to God the King!
And preach to men on earth.

O, Holy Child of Bethlehem!
Descend to us we pray!
Cast out our sin and enter in.
Be born in us to-day,
We hear the Christmas angels,
The great glad tidings tell,
O, come to us, abide with us,
Our Lord Emanuel.

—PHILLIPS BROOKS.

CHILDREN REPRODUCE STORY AFTER DISCUSSION.

THE STRANGE CHILD'S CHRISTMAS

There went a stranger child, as Christmas eve closed in,
Through the streets of a town whose windows shone
With the warmth and light within.

It stopped at every house, the Christmas tree to see,
On that festive night when they shone so bright,
And it sighed right bitterly.

Then wept the child, and said: "This night hath every one
A Christmas tree that he glad may be
And I alone have none.

"Ah, when I lived at home, from brother's and sister's hand
I had my share; but there's none to care
For me in the stranger's land.

"Will no one let me in? No presents I would crave,
But to see the light and the tree all bright,
And the gifts that others have."

At shutter and door and gate, it knocked with a timid hand,
But none will mark, where alone in the dark,
The little child doth stand.

Each father brings home gifts, each mother kind and mild;
There is joy for all, but none will call
And welcome that lonely child.

"Mother and father are dead—O, Jesus, kind and dear,
I've no one now, there is none but Thou,
For I am forgotten here."

The poor child rubs its hands, all frozen and numbed with cold,
And draws round its head with shrinking dread,
Its garments worn and old.

But see—another child comes gliding through the street,
And its robe is white, in its hand a light,
It speaks and its voice is sweet.

"Once on this earth a child, I lived as thou livest yet,
Though all turn away from thee to-day,
Yet I will not forget.

"Each child with equal love, I hold beneath my care,—
In the street's dull gloom, in the lighted room,
I am with them everywhere.

"Here in the darkness dim, I'll show thee child, thy tree;
Those that spread their light through the chambers bright,
So lovely scarce can be."

And with its white hand, points the Christ-child to the sky.
And lo! afar, with each lamp a star,
A tree gleamed there on high.

So far and yet so near, the light shone overhead;
And all was well, for the child could tell
For whom that tree was spread.

It gazed as in a dream, and angels bent and smiled,
And with outstretched hands, to the brighter land,
They carried the stranger child.

And the little one went home with its Savior Christ to stay,
All the hunger and cold and the pain of old
Forgotten and passed away.

—*Classic Stories for the Little Ones.*

What do we learn regarding the stranger child in the first three stanzas? In the next four? Which stanza tells about his friends and his sufferings? Describe the Child that came to meet him. What did he say and do? Compare the pictures in the first three stanzas with the pictures in the last three.

CHRISTMAS EVE

God bless the little stockings all over the land to-night
Hung in the choicest corners, in the glory of crimson light.
The tiny scarlet stockings, with a hole in the heel and toe,
Worn by the wonderful journeys that the darlings have to go.
And Heaven pity the children, wherever their homes may be,
Who wake at the first gray dawning, an empty stocking to see.

—SELECTED.

FOR DISCUSSION AND REPRODUCTION

THE CHRISTMAS BELLS

Many, many years ago in a far away land, stood a beautiful church. On top of the church was a great tall steeple, and in the steeple hung three bells. There was a great iron bell that said, "Clang! Clang! Clang!" a smaller bell that said, "Cling! Cling! Cling!" and a tiny silver bell that said, "Ting! Ting! Ting!" When Christmas came the bells all rang out in chorus the glad tidings of peace and good will. But one Christmas day something dreadful happened—no bells were heard ringing out across the snow. Year after year passed by and on each Christmas day the people gathered at the church bringing beautiful gifts, but the bells did not ring. At last there was only one old man who could remember the time when the bells had tolled the Christmas story, and indeed many people said that the bells had never rung.

Not far from the church lived a dear little boy named Pedro, and with him "Little Brother." One day an old lady gave Pedro a lily bulb and told him to plant it and some day it would grow into a beautiful lily. So Pedro watered and watched the bulb until at last he saw two tiny green leaves peeping from the dark earth. How happy he was and how happy Little Brother was too. They cared for it very tenderly and on Christmas day a beautiful blossom unfolded its white petals.

Early in the morning the people began to gather at the church, bringing their gifts to place on the altar, for it was the birthday of the Christ-Child. Pedro looked at his lily and said: "Little Brother, we, too, may take an offering to the church to-day," and he gazed wistfully at the tall church spire. "Surely Christ would love the beautiful flower."

So they took the lily, wrapped it securely to protect it from the cold, and started for the church. As they trudged along they heard a pitiful sound, and looking down in the snow, found a poor little bird almost dead from cold and hunger. Pedro gave the lily to Little Brother to carry to the church while he returned home with the bird.

When Little Brother entered the church he found it filled with people, so he stole very softly to a seat and waited. At last all was ready. Then the people began to bring their offerings.

First came the king, and with majestic step walked to the altar. He took from his head his beautiful jeweled crown, laid it upon the altar.

The people waited—but the bells did not ring. Next came the queen, and with proud and haughty step walked up the aisle and placed her beautiful jewels upon the altar, and the people waited—but the bells did not ring. Next came the soldiers in their bright uniforms and brought their swords to lay upon the altar, and still the bells did not ring.

At last all had taken their offerings—all except Little Brother. The altar was piled with beautiful gifts and the people had all hoped that once more the bells might ring. Then Little Brother looked at the lily and thought how sad Pedro would feel when he found that it had not been offered to the Christ-Child, for no one had brought a flower that day—only gold and silver and jewels.

Then Little Brother took the lily and going timidly up the aisle he placed it upon the altar. Some of the people smiled, for it was such a little thing, they said. But just as Little Brother turned to go back to his place something very wonderful happened—the bells began to ring. The great iron bell said, "Clang! Clang! Clang!" and the smaller bell said, "Cling! Cling! Cling!" and the tiny silver bell said, "Ting! Ting! Ting!" Little Brother ran from the church to tell Pedro the glad news —his lily had made the bells ring and together they stood in the snow and listened and then went joyfully back to their cottage.

Many years after, Pedro grew to be a wonderful musician. When he was asked who taught him this beautiful music he would say: "The bells brought me the message when they rang out across the snow that happy Christmas-day."

Adapted by Grace Sullivan.

Teacher, tell the story and lead pupils to reproduce it and discover the beautiful meaning.

The whole world is a Christmas tree,
And stars its many candles be,
O, sing a carol joyfully,
The world's great feast in keeping;
For once on a December night,
An angel held a candle bright,
And led three wise men by its light,
To where a Child was sleeping.

—SELECTED.

POEM FOR READING AND DISCUSSION:

A JEWISH LEGEND

I like the old, kind legend, not found in Holy Writ,
And wish that John or Matthew, had made Bible out of it.
But though it is no gospel, there is no law to hold
The heart from growing better, that hears the story told:—

How the little Jewish children, upon a summer day,
Went down across the meadows with the Christ-Child to play.
And in the gold-green valley, where low the reed-grass lay,
They made them mock mud-sparrows, out of the meadow clay.

So, when these all were fashioned, and ranged in rows about,
"Now," said the little Jesus, "we'll let the birds fly out."
Then all the happy children, did call and coax and cry—
Each to his own mud-sparrow: "Fly, as I bid you! Fly!"

But earthen were the sparrows, and earth they did remain,
Though loud the Jewish children, cried out, and cried again—
Except the one bird only, the little Lord Christ made;
The earth that owned Him Master,—His earth heard and obeyed—

Softly He leaned and whispered, "Fly up to Heaven! Fly!"
And swift His little sparrow, went soaring to the sky.
And silent all the children stood, awestruck, looking on,
Till, deep into the heavens, the bird of earth had gone.
Our souls are like the sparrows, imprisoned in the clay;
Bless Him who came to give them wings, upon a Christmas day!

—ELIZABETH STUART PHELPS (MRS. WARD.)

Houghton, Mifflin & Co.

Where were the Jewish children? What did they do? What did the Christ-Child say? Do you see the children? Explain the last stanza.

Teacher, tell the story and lead children to reproduce it after thoughtful discussion.

St. Christopher

A great Italian artist named Titian painted the picture of Saint Christopher on the wall of the Dodge's palace in Venice.

The picture was so placed that the Dodge must look upon it every morning when he left his room. Near the painting the following words were written, "Whoever shall behold the image of St. Christopher, on that day shall not faint or fail."

Helen Hunt Jackson says:

"For many a year Saint Christopher
Served God in many a land;
And master painters drew his face,
With loving heart and hand,
On altar fronts and churches' walls;
And peasants used to say,
To look on good Saint Christopher
Brought luck for all the day." * * *

—*By permission of Little, Brown & Co.*

LEGEND OF SAINT CHRISTOPHER

St. Christopher wandered far and near in search of the greatest king and was determined to obey no other. After serving various masters, whom in turn he deserted because each recognized a ruler greater than himself, he heard of Christ, the king of heaven and earth, and begged a holy hermit to tell him where to find Christ and how he might serve Him. The hermit said:

"Knowest thou a certain river, stony, and wide, and deep, and often swollen by the rains, so that many people perish who attempt to pass over?"

And Saint Christopher answered, "I know it."

Then said the hermit, "Go to that river, and use thy strength to aid and to save those who struggle with the stream, and those who are about to perish." To which Christopher replied joyfully, "This I can do."

So he went as the hermit had directed, and he dwelt by the side of the river; and having rooted up a pine tree from the forest—so strong he was and tall,—he used it for a staff to support and guide his steps; and he aided those who were about to sink, and the weak he carried on his shoulders across the stream; and by day and by night he was always ready for his task, and failed not, and was never weary while helping those who needed help.

Christopher one night heard a voice which called to him from the shore; it was the plaintive voice of a child, and it seemed to say: "Christopher, come forth and carry me over!"

And he rose and looked out, but he saw nothing; then he lay down again; but the voice called to him in the same words a second and a third time; and the third time he sought round about with a lantern;

and at length he beheld a little child sitting on the bank, who entreated him, saying, "Christopher, carry me over this night."

And Christopher lifted the child on his strong shoulders, and took his staff and entered the stream.

And the waters rose higher and higher; and the waves roared, and the wind blew; and the infant on his shoulders became heavier and heavier, 'till it seemed to him that he must sink under the great weight; and he began to fear. But nevertheless, taking courage and staying his tottering steps with his palm-staff, he at length reached the opposite bank; and when he had laid the child down, safely and gently, he looked upon him with astonishment and he said:

"Who art thou, child, that hath placed me in such peril? Had I carried the whole world on my shoulders the burden had not been heavier!"

And the child replied:

"Wonder not, good Christopher; for thou hast not only borne the world, but Him who made the world, upon thy shoulders. Me wouldst thou serve in this work of charity; and, behold, I have accepted thy service and thee; plant thy staff in the ground, and it shall put forth leaves and fruit!"

Christopher did so, and the dry staff flourished as a palm-tree in the season, and was covered with clusters of fruit; but the Divine Child vanished.

(Adapted.)—Miss Wiltse Kindergarten Stories.

HIAWATHA

The poetic side of Indian life so beautifully portrayed in Longfellow's poem, appeals to children and little effort is required to lead them to find

"Tongues in trees
Books in running brooks, sermons in stones
And good in everything."

Hiawatha's knowledge of his environment is an inspiration and cannot fail to stimulate a desire to learn the secrets of the flowers, the birds and the beasts that the little Indian boy knew.

The poet's description of Hiawatha's home, childhood, and school, suggest many beautiful pictures of Nature, and also tell us how this child of the forest learned his lessons.

By reading, conversation, and pictures help the children to see the wigwam, the Big-Sea Water, and the dark and gloomy pine trees. Children, compare Hiawatha's home with their homes. Location, size, material, furniture, comfort, etc.

Compare Hiawatha's food with theirs as to ways of obtaining, preparing and serving it. Study fish, maple-sugar, and corn.

Compare Hiawatha's clothing with that of the children in school as to material, durability and beauty. Visit the forest in imagination and see the animals that Hiawatha knew; the plants. Compare animals that live in the forest with those that live in the water. Compare beauty of the forest with beauty of the lake. Compare uses of each to man.

Locate a linden, a pine, and other trees that Hiawatha knew, and compare linden with pine.

Describe Hiawatha's lamp (fire-fly). How did Nokomis heat the wigwam? What did this little boy hear and see on summer evenings?

MEMORIZE:

HIAWATHA'S SCHOOL

Then the little Hiawatha
Learned of every bird its language;
Learned their names and all their secrets;
How they built their nests in summer,
Where they hid themselves in winter;
Talked with them where'er he met them,
Called them "Hiawatha's Chickens."

Of all the beasts he learned their language;
Learned their names and all their secrets;
How the beavers built their lodges;
Where the squirrels hid their acorns;

How the reindeer ran so swiftly;
Why the rabbit was so timid;
Talked with them where'er he met them,
Called them "Hiawatha's Brothers."

What did Nokomis and Iagoo teach Hiawatha? Children compare Hiawatha's school with their own as to size, comfort, subjects taught, etc.

What can you tell of the animals named in the poem?

Hiawatha learned his lessons on the lake, on the river, and in the fields.

The whispering of the wind through the branches, the clouds, the stars, the rainbow—everything in nature delighted him.

Let children compare the birds that Hiawatha knew with the birds they know.

Study clouds, frost, snow, rain, and make a weather report each day.

Emphasize the thought of co-operation in nature—sunshine, soil, rain, working together to build up the forest, the forest contributing food and shelter for animal life.

Children compare their friends with those of Hiawatha and their games with those of the Indians.

Compare industrial life of Indians with ours,—dishes of horn, shell, clay, etc. Hiawatha's canoe compared with our cars and steamboats. Study life history of material used by Hiawatha for food and clothing.

Children reproduce by drawing, modeling or painting the objects studied and commit description of home, school, social and industrial life.

INDIAN CRADLE SONG

Swing thee low, in thy cradle soft,
Deep in the dusky wood;
Swing thee low and swing aloft;
Sleep as a pappoose should,
For safe in your little nest,
Quiet will come, and peace and rest,
If the little pappoose is good. * * *

What message had the rainbow for Hiawatha?

This is the message it has for us:

Yet not alone to charm thy sight
Was given the vision fair;—
Gaze on that arch of color'd light,
And read God's mercy there.
It tells us that the mighty deep,
Fast by th' Eternal chain'd,
No more o'er earth's domains shall sweep,
Awful and unrestrain'd.
* * * *

—SELECTED.

THE CAT

Aim.—To guide children into the careful observation of the domestic animals.

Preparatory Work.—Give children definite questions to answer by studying the cat at home. Tell how the cat drinks. Tell how she finds and catches her food. Watch her at play and describe her movements. Examine her eyes in the dark and tell how they look. How do you know when she is angry? when she is pleased? Can you tell when she is hungry? How? Watch her washing herself and tell how she does it. Examine her feet and tell how it is that she can walk so quietly. Have you seen her climbing? How are her claws

FOUR LITTLE SCAMPS ARE WE—*By J. Adam*

fitted for climbing? How are her teeth fitted for tearing flesh? Have you seen a mother cat caring for her kittens? How did she carry them? wash them?

Observe the flexibility of the joints. Note the ease with which she jumps and springs.

Repeat:

"And often we run races,
And play at hide and seek;
Or she will climb the cherry tree
And through the branches peep."

Give children an opportunity to tell interesting things about their kittens—how they care for them, play with them, etc.

TELL THE STORY OF

"THE CAT AND THE MONKEY."

Once upon a time a cat and a monkey lived in the same family. One day as they were walking together, they saw some chestnuts roasting in a hot fire. The monkey said, "There, my friend, is an excellent dinner for us. It is a good thing that you have such fine paws. No animal in the world has paws so well adapted for getting chestnuts out of the fire. I am always ashamed of my clumsy claws. You use your paws so gracefully, I love to watch you. Hurry and pull out the nuts and you shall have half of them." Pussy was very much flattered, and thrust her paws into the hot fire, burning them severely, of course.

The monkey began to eat the chestnuts as fast as the cat pulled them out of the ashes, and when pussy was ready for her dinner the chestnuts were all gone, the monkey had eaten every one of them.

Children, tell the meaning of this fable.

After the children have observed the cat at home for a week or so and described her manner of eating, climbing, playing, etc., request one of the pupils to bring her kitten to school.

Study structure of the body and lead children to see how well adapted each part of the body is for its use.—Smooth pads or cushions on the under side of her paws so that she can move noiselessly. Why is that necessary? Each toe has a very strong, sharp claw. She stretches out her claws when she wishes to seize her prey, or to defend herself.

Her long whiskers (feelers) help her to feel her way in the dark.

The erect ears enable her to catch sounds quickly when she is hunting for food.

The teeth are long and sharp. Four of them, two in each jaw, are very strong and sharp pointed "tearing teeth."

The tongue is covered with sharp points which enable her to tear the flesh from the bone. She can bend her tongue into a form almost like a spoon, when she laps milk.

The pupil of her eye is round and large in the dark, and long and narrow in bright light.

She can brush her fur with her tongue and comb it with her paws.

Examine her soft warm fur. Let children tell about the color of different cats. Watch the cat playing with a ball or string, and see how the fore legs are fitted for catching things quickly.

Tell children about the old cat that was so noted for killing mice. The mice held a council. One said, "Let us hang a bell on the cat's neck." Excellent plan all agreed. They found a bell. Who will hang it on her neck? "I am lame and cannot run fast enough," said one. "I have too many home duties," said another. Finally all stole quietly away and nothing more was heard about belling the cat.

KITTEN PLAYING WITH LEAVES

See the kitten! how she starts!
Crouches, stretches, paws, and darts
First at one, and then its fellow,
Just as light and just as yellow!
There are many now; now one;
Now they stop, and here are none;
What intenseness of desire
In her upward eye of fire!
* * * —WORDSWORTH.

Let pupils compare the cat with the dog,—characteristics, food, service they render, etc.

Tell children about the St. Bernard, Newfoundland, Eskimo, and other interesting dogs.

WATER

ITS FORMS AND USES

Aim.—To help children to appreciate the beauty and the importance of water.

To furnish a basis for geography work.

Suggestions.—Informal talks with pupils, to impress the thought of the dependence of all life on water.

Lead children to tell ways in which it is useful to animal and plant life, to the soil, and to the air.

Great interest may be awakened in the subject by having a few simple experiments performed to show the importance of the dissolving and penetrating power of water (soil, salt, sugar, etc.).

EVAPORATION

Direct attention to the changing of water into water-dust, which is visible, and into vapor, which is invisible. Lead pupils to discover the effect of heat in increasing evaporation.

A bottle of water, a small oil stove or alcohol lamp, a shallow dish, and three or four jelly glasses are all the apparatus required.

Call attention to the drying of clothes, the disappearance of water on pavements, streets, and roads after a rain.

Heat water and observe rising of air bubbles, evaporation, formation of clouds, etc. Heat changes the water into vapor, and vapor gives rise to mist, clouds, rain, dew, fog, and frost.

Let children fill several glasses with water, cover one, put one in the sun, one in the shade, pour a glass of water into a shallow dish and leave it in the sun. Account for the difference in the amount of water in the four dishes after a day or two. Let children report their observations and help to perform many experiments illustrating evaporation.

Hold a cold plate in vapor, or "water-dust" and note what happens.

Bring a pitcher of ice water into a warm room and see how quickly a fine film of mist is formed on the outside—watch the tiny particles of water unite, form large drops, and trickle down the side of the pitcher. Insist upon personal observation. When the invisible vapor in the air becomes visible, it is said to be condensed.

Children, watch the cloud rising from a locomotive and report appearance and movements.

The sun's heat causes constant evaporation from the surface of all bodies of water exposed to its rays.

Water vapor is lighter than the atmosphere and is continually rising into colder regions where it is condensed (clouds).

The observation in the home of what may be seen on wash-day will help children to understand the formation of clouds, fog, dew, etc.

DEW

When is dew formed and where does it come from? Have you seen dew-drops sparkling upon the grass? upon cobwebs? Review evaporation and condensation. Does the dew form on windy or calm nights? on clear or cloudy nights?

Dew comes from the air by condensation as the mist formed upon the pitcher in the warm room.

CLOUDS

Children will delight in discovering palaces, cities, mountains, and animals in the clouds. Observe the colors in the sky at sunset, sunrise, and before and after a storm. Where do the clouds come from? Have you ever seen clouds in the house? Have you seen clouds moving in different directions at the same time? Have you seen the "silver lining"?

Tell the story of Franklin and his kite.

Direct attention to the different kinds of clouds—feather or cirrus clouds, rain or nimbus clouds, etc.

Uses—They beautify the world, they hold the sun's hot rays and thus make the earth cooler for us, and produce by condensation rain and snow.

Older children memorize two or three stanzas of Shelley's "The Cloud" after thoughtful discussion.

THE CLOUD

I bring fresh showers for the thirsting flowers
From the sea and the streams;
I bear light shade for the leaves when laid
In their noonday dreams.
From my wings are shaken the dews that waken
The sweet birds every one,
When rocked to rest on their Mother's breast,
As she dances about the sun.
I wield the flail of the lashing hail
And whiten the green plains under,
And then again I dissolve it in rain,
And laugh as I pass in thunder.

I sift the snow on the mountains below,
And the great pines groan aghast;
And all the night 'tis my pillow white,
While I sleep in the arms of the Blast.
That orbed maiden with white fire laden
Whom mortals call the Moon,
Glides glimmering o'er my fleece-like floor
By the midnight breezes strewn;
And wherever the beat of her unseen feet,

Which only angels hear,
May have broken the woof of my tent's thin roof
The Stars peep behind her and peer.
And I laugh to see them whirl and flee
Like a swarm of golden bees,
When I widen the rent in my wind-built tent—
Till the calm rivers, lakes, and seas,

Like strips of the sky fallen through me on high,
Are each paved with the moon and these.
I bind the Sun's throne with a burning zone,
And the Moon's with a girdle of pearl;
The volcanoes are dim, and the stars reel and swim,
When the whirlwinds my banner unfurl.
From cape to cape with a bridge-like shape,
Over a torrent sea,
Sun-beam proof, I hang like a roof;
The mountains its columns be.
The triumphal arch through which I march,
With hurricane, fire and snow,
When the Powers of the air are chained to my chair
Is a million-colored bow;
The Sphere-fire above, its soft colors wove,
Whilst the moist Earth was laughing below.
I am the daughter of Earth and Water,
And the nursling of the Sky;
I pass through the pores of the ocean and shores;
I change, but I cannot die.

—Percy Bysshe Shelley.

What does the cloud do for the earth? the sun? the moon? Which stanza do you like best?

CLOUDS

Plump little baby clouds, dimpled and soft,
Rock in their air cradles swinging aloft.
Snowy cloud mothers, with broad bosom white,
Watch o'er the baby clouds, slumbering light.
Tired little baby clouds, dreaming of fears,
Turn in their air-cradles, dropping soft tears.
Great snowy mother clouds, brooding o'er all,
Let their warm mother tears tenderly fall.

FROST

Recall what children learned about evaporation and condensation in preceding lessons.

Observe, when possible, the frost work growing or spreading over the window-panes.

Find trees, ferns and flowers in the frost pictures. What is Jack Frost sometimes called?

This poem tells us about his work:

If a wooden pail is partly filled with a mixture of salt and finely chopped ice it will soon become coated with star-like frost crystals. Children, observe beauty.

What is the difference between dew and frost? Frost is vapor condensed to the solid instead of to the liquid form.

Does the frost ever do harm?

What good does it do?

THE LITTLE ARTIST

Oh, there is a little artist
Who paints in the cold night hours
Pictures for wee, wee children,
Of wondrous trees and flowers—
Pictures of snow-capped mountains
Touching the snow-white sky;
Pictures of distant oceans,
Where pigmy ships sail by;
Pictures of rushing rivers,
By fairy bridges spanned;
Bits of beautiful landscapes,
Copied from elfin land.
The moon is the lamp he paints by,
His canvas the window-pane,
His brush is the frosen snow-flake;
Jack Frost is the artist's name.

—SELECTED.

Decorates trees and grasses with diamonds, makes fairy pictures on our windows, makes all the snow-flakes. Improves some fruits. Forms the beautiful cirrus clouds.

Children, sketch pictures.

The frost breaks up the ground for the farmer. Breaks up the rocks to help form soil. Helps to open nuts for the children and the squirrels. Tells the trees and the flowers when it is time to rest. Covers ponds and rivers with ice. Emphasize beauty in discussing the work of the frost. This picture is worthy of special study.

"The little brook heard it and built a roof
'Neath which he could house him, winter proof;
All night by the white stars' frosty gleams
He groined his arches and matched his beams;
Slender and clear were his crystal spars
As the lashes of light that trim the stars;
He sculptured every summer delight
In his halls and chambers out of sight;

Sometimes his tinkling waters slipt
Down through a frost-leaved forest crypt,
Long, sparkling aisles of steel-stemmed trees
Bending to counterfeit a breeze;
Sometimes the roof no fretwork knew
But silvery mosses that downward grew;
Sometimes it was carved in sharp relief
With quaint arabesques of ice fern leaf;
Sometimes it was simply smooth and clear
For the gladness of heaven to shine through, and here
He had caught the nodding bulrush-tops
And hung them thickly with diamond drops,
That crystalled the beams of moon and sun,
And made a star of every one;
No mortal builder's most rare device
Could match this winter-palace of ice.—J. R. LOWELL.
From the Vision of Sir Launfal.

Why did the frost build the ice palace? When did he work? Do you see the aisles? the arches? the roof? How did the roof look sometimes? Have you heard of the Crystal Palace? Children, memorize poem.

ICE

Set a pie tin or other dish containing water on the window sill where the sun does not shine, and let children watch water freeze into ice.

Impress the thought contained in the following selection taken from "The Music of Nature." (Silver, Burdett Co.)

And the frost, too, has a melodious "ministry." You will hear its crystals shoot in the dead of a clear night, as if the moonbeams were splintering like arrows on the ground; and you will listen to it the more earnestly, that it is the going on of one of the most cunning and beautiful of Nature's deep mysteries. I know nothing so wonderful as the shooting of a crystal. God has hidden its principle, as yet, from the inquisitive eye of the philosopher, and we must be content to gaze on its exquisite beauty and listen, in mute wonder, to the noise of its invisible workmanship. It is too fine a knowledge for us. We shall comprehend it when we know how the morning stars sang together.

Direct attention to the beauty and purity of the snow. Watch the falling of the flakes. Tell ways in which the snow beautifies the earth; ways in which it protects plants and animals.

Children, collect flakes on slate or on a piece of black cloth and see how many kinds you can find. Note beauty. Find pine and elm trees covered with snow and repeat stanza from Lowell's "First Snowfall." Read and discuss "Snow Bound" and "Little People of the Snow."

Let children tell about their favorite winter sports. Read "A Snow Song."

SNOW-FLAKES

Once upon a time a little raindrop thought it had played long enough up in the clouds, and said it would go down to the earth and see what good it could do. So it started.

While it was falling, it had to pass through a cloud that was very cold, and this little raindrop, instead of shrinking together as we do when we are cold, stretched out and stretched out, until it was not round any more, but was long, and thin, and hard like a needle; and that is just what it was—a little ice needle.

As it went on falling, it met another just like itself.

The second said, "Little Ice Needle, where are you going?"

"Down to the earth, to see what good I can do."

"I'll go too." So the second ice needle joined the first, and they fell together.

Pretty soon they met a third, who said, "Little Ice Needles, where are you going?"

"Down to the earth, to see what we can do."

"Then I'll go too." So it joined the others, and they fell together. Then they met another, and another, and another, who all joined them. Then there were six little ice needles falling together, and they had a new name—"Snow-flake."

Little Snow-flake met others, who asked where it was going. "Down to the earth, to see what good I can do."

"We'll go too. But where shall we go?"

"I know," said one of the little flakes. "Last summer, when I was

warm and round, I saw a place where a poor little sick boy had planted some seeds which a kind lady had given to him. Let us fall on that place and keep it warm, so that the seeds in the ground may not freeze, and the little boy may have some flowers next summer."

"O! so we will," said they all; and they fell faster and faster, so that they might get there sooner. Other snow-flakes saw them and went, too, and the ground was covered more and more thickly with snow, till there was enough to keep the seeds from freezing during the winter.

When the weather began to be warm, the snow turned into water and ran down into the earth, and the seeds drank it, and swelled and swelled, until by and by little leaves came out above the ground from each seed. Then other leaves grew, and when summer came, little Frank had his flowers again, and all because one little raindrop wanted to do some good in the world.

This is the way the snow comes down,
Softly, softly falling,
So He sendeth His snow like wool.
Soft and white and beautiful,
This is the way the snow comes down,
Softly, softly falling.—LONGFELLOW.

—JOSEPHINE JARVIS.

How does the snow help the Eskimos? Picture the life of Agoonack.

Compare the little Eskimo's life with Hiawatha's.

A SNOW SONG

There's a wonderful weaver,
High up in the air,
And he weaves a white mantle
For cold Earth to wear.
With the wind for his shuttle,
The cloud for his loom,
How he weaves, how he weaves,
In the light, in the gloom!

Oh! with finest of lace
He decks bush and tree;
On the broad barren meadows
A cover lays he;
Then a quaint cap he places
On pillar and post,
And he changes the pump
To a silent, grim ghost.

But this wonderful weaver
  Grows weary at last,
And the shuttle lies idle
That once flew so fast.
Then the sun peeps abroad
  On the work he has done,
And cries, "I'll unravel it all,
  Just for fun."

GEO. COOPER.

He who marvels at the beauty of the world in summer will find equal cause for wonder and admiration in winter. * * Look up at the miracle of the falling snow: the air, a dizzy maze of whirling, eddying flakes, noiselessly transforming the world; the exquisite crystals dropping in ditch and gutter, and disguising in the same suit of spotless livery all objects upon which they fall. How novel and fine the first drifts! The old dilapidated fence is suddenly set off with the most fantastic ruffles, scalloped and fluted after an unheard-of fashion! Looking down a long line of decrepit stone wall, in the trimming of which the wind had fairly run riot, I saw, as for the first time, what a severe artist old winter is. Ah, a severe artist! How stern the woods look, dark and cold and as rigid against the horizon as iron. * * No longer the canvas and the pigments, but the marble and the chisel.

* * * The sunbeams are welcome now. They seem like pure electricity,—like friendly and recuperating lightening. Are we led to think electricity abounds only in summer, when we see in the storm-clouds, as it were, the veins and ore-beds of it? * * Behold the frost work on the pane,—the wild, fantastic linings and etchings! Can there be any doubt but this subtle agent has been here? Where is it not? It is the life of the crystal, the architect of the flake, the fire of the frost, the soul of the sunbeam. This crisp winter air is full of it.

* * * *

But with March our interest in winter begins to decline.

Vague rumors are afloat in the air of a great and coming change. We are eager for winter to be gone, since he, too, is a fugitive and cannot keep his place. Invisible hands deface his icy statuary; his chisel has lost its cunning. The drifts, so pure and exquisite, are now earth-stained and weather-worn, —the flutes and scallops, and fine firm lines, all gone; and what was a grace and an ornament to the hills is now a disfiguration. Like worn and unwashed linen appear the remains of that spotless robe with which he clothed the world as his bride.

But he will not abdicate without a struggle. Day after day he rallies his scattered forces, and night after night pitches his white tents on the hills, and would fain regain his lost ground; but the young prince in every encounter prevails. Slowly and reluctantly the gray old hero retreats up the mountain, till finally the south rain comes in earnest and in a night he is dead.—BURROUGHS. *Winter Sunshine.* By special permission of and arrangement with Houghton, Mifflin & Co.

RAIN

Observe the clouds before a rainstorm. Review evaporation and condensation. Children, watch the rain coming down, listen to its patter on the window, and its splash in the pond.

What do you infer respecting currents of air when you see clouds moving in one direction and at the same time other clouds moving in a different direction?

If a warm current of air comes in contact with a cold current what may happen? Which is heavier water or ice? (The vapor may be condensed into ice crystals or into mist particles. In the summer many of the clouds you see are banks of ice crystals).

What becomes of the water after a rain? A part of it changes to vapor; a part of it flows over the ground to the nearest streams, while another part sinks into the ground. Find out uses of water that sinks below the surface.

How are springs formed?

How are the roots of plants nourished? Put salt in a cup of boiling water, hold plate over cup, taste the drops of water that collect on plate.

Talk with the pupils about the work of the sun in taking up water from the ocean (evaporation).

Children, trace a raindrop from its home in the lake to the clouds and back to the earth again.

Uses of Water.—In the air? As a motive power? To plants and animals? As a means of travel? In the home? In the soil? In purifying the atmosphere? Some of the inequalities of the surface of the earth may be traced to the action of water.

WORK OF STREAMS

Field Lesson.—Direct children's attention to the work of water in carrying and depositing soil, width of river, windings, etc.

In what kind of soil does it wear most rapidly? Read:

O tell me pretty brooklet!
Whence do thy waters flow?
And whither art thou roaming,
So smoothly and so slow?
My birthplace was the mountain,
My nurse the April showers;
My cradle was a fountain
O'er curtained by wild flowers.—ANON.

Little brook that floweth by,
Under vine and willow,
Fair thou lookest on the sky,
Hastening to the billow.
Brooklet, thou and I are one,
Both in mood and motion;
Fair the fields, but brief the run
To the soundless ocean.

—DANIEL J. DONAHOE.

SPRINGS

A spring is always a vital point in the landscape; it is, indeed, the eye of the fields. * * Here the Sunday saunterer stops and lounges with his book, and bathes his hands and face in the cool fountain. Hither the strawberry-girl comes with her basket and pauses a moment. The plowman leaves his plow, and in long strides approaches the life-renewing spot. * * Here the cattle love to pass the heat of the day, and hither come the birds to wash themselves and make themselves clean. * * It is a creative and generative center. It attracts all things to itself,—the grasses, the mosses, the flowers, the wild plants, the great trees. * * An intermittent spring is shallow; it has no deep root and is like an inconstant friend. But a perennial spring, one whose ways are appointed, one whose foundation is established, what a profound and beautiful symbol!—*From Pepacton.* JOHN BURROUGHS. By permission of and special arrangement with Houghton, Mifflin & Co.

MAKE A SPECIAL STUDY OF THIS POEM:

THE BROOK

I come from haunts of coot and hern,
I make a sudden sally,
And sparkle out among the fern,
To bicker down a valley.

By thirty hills I hurry down,
Or slip between the ridges;
By twenty thorps, a little town,
And half a hundred bridges.

I chatter over stony ways,
In little sharps and trebles,
I bubble into eddying bays,
I babble on the pebbles.

With many a curve my banks I fret,
  By many a field and fallow,
And many a fairy foreland set
  With willow-weed and mallow.

I chatter, chatter, as I flow
  To join the brimming river;
For men may come and men may go
  But I go on forever.

I wind about, and in and out,
  With here a blossom sailing,
And here and there a lusty trout,
  And here and there a grayling,

And here and there a foamy flake
  Upon me, as I travel,
With many a silvery waterbreak
  Above the golden gravel.

I steal by lawns and grassy plots,
  I slide by hazel covers;
I move the sweet forget-me-nots
  That grow for happy lovers.

I slip, I slide, I gloom, I glance,
  Among my skimming swallows;
I make the netted sunbeams dance
  Against my sandy shallows.

I murmur under moon and stars
  In brambly wildernesses;
I linger by my shingly bars;
  I loiter round my cresses.

And out again I curve and flow
  To join the brimming river,
For men may come and men may go
  But I go on forever.

—TENNYSON.

A SONG OF THE SEA

The sea! the sea! the open sea!
The blue, the fresh, the ever free!
Without a mark, without a bound,
It runneth the earth's wide regions round,
It plays with the clouds, it mocks the skies,
Or like a cradled creature lies.

I love (oh! how I love) to ride
On the fierce, foaming, bursting tide
When every mad wave drowns the moon,
Or whistles aloft his tempest tune,
And tells how goeth the world below
And why the southwest blasts do blow.

—BRYAN WALTER PROCTOR (Barry Cornwall).

Henry Van Dyke writes:

A river is the most human and companionable of all inanimate things. It has a life, a character, a voice of its own, and is as full of good fellowship as a sugar-maple is of sap. It can talk in various tones, loud or low, and of many subjects, grave and gay. Under favorable circumstances it will even make a shift to sing; not in a fashion that can be reduced to notes, but in a vague, refreshing manner, and to a wandering air that goes "O'er the hills and far away."—*From Little Rivers.* HENRY VAN DYKE. Copyright, 1895, by Chas. Scribner's Sons.

APOSTROPHE TO THE OCEAN

Roll on, thou deep and dark blue ocean—roll!
Ten thousand fleets sweep over thee in vain;
Man marks the earth with ruin—his control
Stops with the shore;—upon the watery plain
The wrecks are all thy deed, nor doth remain
A shadow of man's ravage, save his own,
When for a moment, like a drop of rain,
He sinks into thy depths with bubbling groan,
Without a grave, unknelled, uncoffined, and unknown.

* * * *

AURORA—*By Guido Reni.*

And I have loved thee, ocean! and my joy
Of youthful sports was on thy breast to be
Borne, like thy bubbles, onward; from a boy
I wantoned with thy breakers—they to me
Were a delight; and if the freshening sea
Made them a terror, 'twas a pleasing fear;
For I was, as it were, a child of thee,
And trusted to thy billows far and near,
And laid my hand upon thy main—as I do here.

—LORD BYRON.

THE SUN

Behold the miracle!
Thou saw'st but now the twilight sad
And stood beneath the firmament,
A watchman in a dark gray tent,
Waiting till God create the earth,—
Behold the new majestic birth!
The mottled clouds, like scraps of woof,
Steeped in the light, are beautiful.

—EMERSON (*Sunrise*).

Direct attention to the appearance of the sky at sunrise and let children note changes that come with morning. Light, heat, birds, etc.

Sweet is the breath of Morn, her rising sweet
With charms of earliest birds; pleasant the sun
When first on this delightful land he spreads
His orient beams, on herb, tree, fruit, and flower,
Glistening with dew.

—MILTON.

Work of the Sun.—Gives beauty to earth and sky (clouds, rainbow, etc.). Recall experiments showing the influence of the sun upon vegetation.

Direct attention to the leaves of plants—arranging themselves so as to get as much light as possible.

Repeat observations made in preceding lessons on evaporation—sun lifts water from rivers, lakes, and oceans up to the mountains, gives light and heat to all the world, and rears the whole vegetable kingdom.

"Sunbeam of summer, oh what is like thee,
Hope of the wilderness, joy of the sea?
One thing is like thee, to mortals given;
The faith touching all things with hues of heaven." * * *

—MRS. HEMANS.

Call attention to shadows.

When is your shadow longest? When is it shortest? Which way does it point in the morning? at noon?

Observe your shadow at different times during the day, for a week, and tell direction in which it falls.

THE FERRY FOR SHADOWTOWN

Sway to and fro in the twilight gray;
This is the ferry for Shadowtown;
It always sails at the end of the day,
Just as the darkness closes down.
Rock slow, more slow in the dusky light,
Silently lower the anchor down:
Dear little passenger, say "Good-night."
We've reached the harbor of Shadowtown.

—SELECTED.

THE SUN'S TRAVELS

The sun is not abed, when I
At night upon my pillow lie;
Still round the earth his way he takes,
And morning after morning makes.

While here at home in shining day,
We round the sunny garden play,
Each little Indian sleepy-head
Is being kissed and put to bed.

And when at eve I rise from tea,
Day dawns beyond the Atlantic sea;
And all the children in the West,
Are getting up and being dressed.

Rand, McNally Co. —ROBERT LOUIS STEPHENSON.

THE SUN

"The sun comes forth;—each mountain height
Glows with a tinge of rosy light,
And flowers that slumber'd through the night
Their dewy leaves unfold;
A flood of splendor bursts on high,
And ocean's breast reflects a sky
Of crimson and of gold.

"Oh! thou art glorious, orb of day!
Exulting nations hail thy ray,
Creation swells a choral lay,
To welcome thy return;
From thee all nature draws her hues,
Thy beams the insect's wings suffuse,
And in the diamond burn."

—SELECTED.

THE SUN

Eye of thy Maker, which hath never slept
Since the Eternal Voice from chaos said,
"Let there be light!" Great monarch of the day,
* * * * Unresting orb!
Pursuest thou, mid the labyrinth of suns,
Some pathway of thine own? Say, dost thou sweep,
With all thy marshall'd planets in thy train,
In grand procession on, through boundless space,
Age after age, towards some mysterious point
Mark'd by His finger?

—SELECTED.

THE MOON

Request children to observe the moon frequently during the month and note changes from night to night.

READ AND DISCUSS:

THE SILVER BOAT

There is a boat upon a sea;
It never stops for you or me.
The sea is blue, the boat is white;
It sails through winter and summer night.

The swarthy child in India land
Points to the prow with eager hand;
The little Lapland babies cry
For the silver boat a-sailing by.

It fears no gale, it fears no wreck;
It never meets a change or check
Through weather fine or weather wild.
The oldest saw it when a child.

Upon another sea below
Full many vessels come and go;
Upon the swaying, swinging tide
Into the distant worlds they ride.

And strange to tell, the sea below,
Where countless vessels come and go,
Obeys the little boat on high
Through all the centuries sailing by.

—SELECTED.

Compare the light of the full moon with the light of the sun.

How often do we have a new moon? Draw the different shapes you have seen. Watch for the crescent of the new moon. Tell children that the sun shines on the moon and the moon sends its light to us after the sun has disappeared—shines by light reflected from the sun.

CHILDREN MEMORIZE:

THE NEW MOON

Dear mother, how pretty
The moon looks to-night!
She was never so cunning before;
Her two little horns
Are so sharp and so bright,
I hope she'll not grow any more.

If I were up there,
With you and my friends,
I'd rock in it, nicely you'd see;
I'd sit in the middle
And hold by both ends;
Oh, what a bright cradle 'twould be!

I would call to the stars
To keep out of the way,
Lest we should rock over their toes;
And then I would rock
Till the dawn of the day,
And see where the pretty moon goes.

And there we would stay
In the beautiful skies;
And through the bright clouds we would roam.
We would see the sun set,
And see the sun rise,
And on the next rainbow come home.

(Silver, Burdette & Co.) —MRS. FOLLEN.

THE STARS

Observe the stars.

Which gives us the most light, the sun or the moon? the stars or the moon? Which looks to be larger, the moon or the sun? the moon or the stars?

Some of the stars are suns, but they are far, very far away

from us. Learn to find the North Star. Do you know the Great Dipper?

Observe the number and arrangement of the stars in the Dipper. How many stars form the handle? the bowl? If one has lost his way on a clear night how may he know which star is the North Star?

* * *

Child of the earth! oh! lift thy glance
To yon bright firmament's expanse,
The glories of its realm explore,
And gaze, and wonder, and adore!
Doth it not speak to every sense
The marvels of Omnipotence?
See'st thou not there th' Almighty name
Inscribed in characters of flame?"

—MRS. HEMANS.

Recall the story of the wise men from far Eastern lands, who studied the stars so long ago and were guided to Bethlehem by that wonderful star which stood still over the place "where the Divine Child was."

The stars guide people over land and sea. On dark nights they are invaluable aids to the mariner.

MEMORIZE:

STARS

They glide upon their endless way,
Forever calm, forever bright;
No blind hurry, no delay,
Mark the daughters of the night;
They follow in the track of day,
In divine light.

Shine on, sweet orbed ones for aye;
Forever calm, forever bright;
We ask not whither lies your way,
Nor whence ye came, nor what your light,
Be still a dream throughout the day,
A blessing through the night.

—BARRY CORNWALL.

FOR REPRODUCTION:

A LEGEND OF THE GREAT DIPPER

The faces of the stars shone so brightly one night that the earth-children thought the moon was telling a pretty story. And so she was, and this is the story:

The great Dipper which you, my dear children, love to see has a deep meaning which you are not to forget as long as the stars shine. I will tell you the story.

In another world than ours, said Lady Moon, there was once great trouble and sorrow. No, it was not in the earth world, my dear, she said to a small star who always asked questions, it was not in the heaven world either, but in another far-away world, where many children lived.

For some good reason, which only the Father knows, the people and children, the animals and every living thing, were suffering great thirst; and no water, nor dew, nor a drop of moisture could they find anywhere. A little child of that world went out alone in the dry, dark night, carrying a small tin dipper, and prayed very earnestly for just that little cup of water; and when she lifted the cup, it was brimming with clear cold water, which would not spill, though she ran rapidly, her hand trembling with her faintness; for she did not taste the water, having prayed for another's need. As she ran, she stumbled and fell, for she was very weak; and when feeling about, trying to rise, she touched a little dog that seemed to be dying of thirst, and the good child poured a few drops of the precious water in the palm of her hand and let the dog lap it. He seemed as refreshed as if he had drank from a river.

The child could not see what happened to her cup; but we saw and sang for joy. The cup turned to silver, and grew larger, the water not having become less, but more, by her giving.

She hurried on to give the water to one who was quite unable to come to meet her,—none other than her own dear mother, who took the water eagerly, as one in a deadly fever, but without putting it to her lips; for she heard just then a weak moan which came from the faithful servant who tried to raise her mistress's head, but found she had not the strength. The mother pressed the dipper into the hands of the maid, and bade her drink, feeling her own life so wasted that one little cup of water could not renew it. And neither servant nor mistress noticed that the dipper changed from silver to gold, and grew larger than before.

The good servant was about to give each member of the family one spoonful of the precious water, when a stranger entered, dressed in a costume unknown in that country, and speaking in a strange tongue, but showing the same signs of thirst and distress as themselves. The

servant said, "Sacred are the needs of the stranger in a strange land," and pressed the dipper to the parched lips of the fainting man.

Then the great wonder was wrought! and the golden dipper flashed forth incrusted with the most precious diamonds, containing a fountain of gushing water, which supplied the thirsting nation, as freely and surely as it had quenched the thirst of the little dog.

And the Stranger stood before them, a glorious, radiant Being; and as He faded from their sight, a silver trumpet tone was heard to proclaim: "Blessed is he that giveth a cup of water in My name."

And the possession of a dipper blazing with diamonds is in that country a sure badge of royalty; for no one can buy or receive one as a gift, nor can fathers bequeath them to their children. Each child is given a tin dipper at its birth, and only by purely unselfish acts can a diamond one be wrought.

Some of the foolish people have not yet learned its secret, and they go about trying to exchange their tin for silver by doing kind deeds. Sometimes they accuse the Father of All very bitterly because they grow old possessing only the tin dipper; for the secret of the exchange can no more be told than the beautiful, flashing, sparkling diamonds can be purchased. Sometimes there are great surprises, when people give up the hope of such a possession, and forget themselves; for then they often find the castaway tin bearing evidence in silver, gold, or even diamonds, that they have become royal; but by that time they have no vanity because of their fortune. Only modest, thankful, brave, happy feelings possess the owners of diamond dippers.

The Lady Moon now lifted a white finger toward the east, which was growing rosy, and the baby stars all knelt a moment, looking like white-robed nuns at prayers. Then the morning wind swept aside the great blue silken curtain of the sky, and the Moon followed her children into Heaven, to do whatever the Father had planned for them while they were out shining for His earth children.

—Told by Sara Wiltse in *Stories and Morning Talks.*

What was the trouble in the far away world? What did the child do? What caused the first great change in the dipper? the second? the third? How may a diamond dipper be obtained? What lesson is taught in this story?

CHILDREN, MEMORIZE THE FOLLOWING BEAUTIFUL LULLABY. It is full of childish fancies. One of the offerings at Eugene Field's funeral was a shoe of white carnations with the words, "Wynken, Blynken, and Nod."

WYNKEN, BLYNKEN, AND NOD

Wynken, Blynken, and Nod one night
Sailed off in a wooden shoe—
Sailed on a river of crystal light,
Into a sea of dew—
"Where are you going, and what do you wish?"
The old moon asked of the three.
"We have come to fish for the herring fish
That live in this beautiful sea;
Nets of silver and gold have we!"
Said Wynken,
Blynken,
And Nod.

The old moon laughed and sang a song,
As they rocked in the wooden shoe,
And the wind that sped them all night long
Ruffled the waves of dew!
The little stars were the herring fish
That lived in that beautiful sea,—
"Now cast your nets wherever you wish—
Never afeard are we;"
So cried the stars to the fishermen three,
Wynken,
Blynken,
And Nod.

All night long their nets they threw
To the stars in the twinkling foam—
Then down from the skies came the wooden shoe,
Bringing the fishermen home;
'Twas all so pretty a sail, it seemed
As if it could not be,

And some folks thought 'twas a dream they dreamed
Of sailing that beautiful sea—
But I shall name you the fishermen three,
Wynken,
Blynken,
And Nod.

Wynken and Blynken are two little eyes,
And Nod is a little head;
And the wooden shoe that sailed the skies,
Is a wee one's trundle-bed.
So shut your eyes while mother sings
Of wonderful sights that be,
And you shall see the beautiful things
As you rock in the misty sea,
Where the old shoe rocked the fishermen three,
Wynken,
Blynken,
And Nod.

—FROM *With Trumpet and Drum.*

Copyright Chas. Scribner's Sons.

CHILDREN MEMORIZE THIS POEM AFTER THOUGHTFUL DISCUSSION:

BIRDS

* * *

Do you ne'er think what wondrous beings these?
Do you ne'er think who made them, and who taught
The dialect they speak, where melodies
Alone are the interpreters of thought?
Whose household words are songs in many keys,
Sweeter than instruments of man e'er caught!
Whose habitations in the tree-tops even
Are half-way houses on the road to heaven!

Think, every morning when the sun peeps through
The dim, leaf-latticed windows of the grove,
How jubilant the happy birds renew
Their old melodious madrigals of love!
And when you think of this, remember too

'Tis always morning somewhere, and above
The awakening continents, from shore to shore,
Somewhere the birds are singing evermore.

Think of your woods and orchards without birds!
Of empty nests that cling to boughs and beams.
You call them thieves and pillagers; but know,
They are the winged wardens of your farms,
Who from the cornfields drive the insidious foe,
And from your harvests keep a hundred harms;
Even the blackest of them all, the crow,
Renders good service as your man-at-arms,
Crushing the beetle in his coat of mail,
And crying havoc on the slug and snail.

—LONGFELLOW, *Birds of Killingworth.*

CHICKADEE

Do you know the little chickadee
In his brownish ashen coat,
With a cap so black and jaunty
And a black patch on his throat?

—SELECTED.

The chickadee, snow-bird, bluejay, English sparrows, and a few other birds can be studied before the snow disappears.

Chickadee.—"Little friend" is what it means. Black-capped Titmouse is another name for this cheery, fearless, sociable little bird. Insects can seldom escape his bright eyes. He finds the tiny eggs hidden under the bark and destroys numberless destructive insects that live in the buds and the tender bark of trees. The nest is generally in an old knot hole and with its four or five white eggs delicately touched with pink, is very pretty. He sleeps in the thick pine shrubs, so that it is hard for the owls and other enemies to find him.

Let children watch his movements and learn as many of his habits as possible.

In studying a bird observe:

Length of bird.

Color,—of upper parts, lower parts, head, neck, breast, wings, tail and feet.

Beak,—shape, length and color.

Feet,—number and arrangement of toes.

Tail,—long, short, square, wide, narrow, etc.

Find out about its:

Food, disposition, habits, song.

Nest building—when, where, materials used, etc.

AN EASTERN LEGEND

There's a tender Eastern legend,
In a volume old and rare,
Of the Christ-child in his garden
Walking with the children there.
And it tells—this strange, sweet story—
(True or false, ah, who shall say?)
How a bird with broken pinion
Dead within the garden lay.

And the children, children cruel,
Lifted it by shattered wing,
Shouting, "Make us merry music,
Sing, you lazy fellow, sing."
But the Christ-child bent above it,
Took it in his gentle hand,
Full of pity for the suffering
He alone could understand.

Whispered to it—oh, so softly!
Laid his lips upon its throat,
And the song-life, swift returning,
Sounded out in one glad note.
Then away, on wings unwearied,
Joyously it sang and soared,
And the little children kneeling
Called the Christ-child "Master—Lord."

—GRACE DUFFIELD GOODWIN in *Our Dumb Animals.*

MADONNA OF THE LILY—*By Leonardo da Vinci*

Help children to understand the beautiful thought in this sweet story.

The Blue Jay.—This pretty bird is not a great favorite. Learn to recognize his song, scream, laugh, and whistle. He has many queer habits.

He stores acorns and nuts in hollow trees and has thus planted forests. Describe the blue jay and discover his good qualities.

This poem is a tribute to his beauty:

THE BLUE JAY

O, Blue Jay, up in the maple tree,
Shaking your throat with such bursts of glee,
How did you happen to be so blue?
Did you steal a bit of the lake for your crest,
And fasten blue violets into your vest?
Tell me, I pray you,—tell me true!

Did you dip your wings in azure dye,
When April began to paint the sky,
That was pale with the winter's stay?
Or were you hatched from a bluebell bright,
'Neath the warm, gold breast of a sunbeam light,
By the river one blue spring day?

O, Blue Jay, up in the maple tree,
A-tossing your saucy head at me,
With ne'er a word for my questioning,
Pray, cease for a moment your "ting-a-link,"
And hear when I tell you what I think,—
You bonniest bit of the spring.

I think when the fairies made the flowers,
To grow in these mossy fields of ours,
Periwinkles and violets rare,
There was left of the spring's own color, blue,
Plenty to fashion a flower whose hue
Would be richer than all and as fair.

So, putting their wits together, they
Made one great blossom so bright and gay,
The lily beside it seemed blurred;
And then they said, "We will toss it in air;
So many blue blossoms grow everywhere,
Let this pretty one be a bird!"

—SUSAN HARTLEY SWETT.

THE FOLLOWING STORY IN VERSE MAY BE USED FOR REPRODUCTION:

THE SPARROWS

In the far-off land of Norway,
Where the winter lingers late,
And longs for the singing birds and flowers
The little children wait;

When at last the summer ripens
And the harvest is gathered in,
And food for the bleak, drear days to come
The toiling people win;

Through all the land the children
In the golden fields remain,
Till their busy little hands have gleaned
A generous sheaf of grain;

All the stalks by the reapers forgotten
They glean to the very least,
To save till cold December,
For the sparrows' Christmas feast.

And then through the frost-locked country
There happens a wonderful thing;
The sparrows flock, north, south, east, west,
For the children's offering.

Of a sudden, the day before Christmas,
The twittering crowd arrive,
And the bitter, wintry air at once
With their chirping is all alive.

They perch upon roof and gable,
On porch and fence and tree,
They flutter about the windows
And peer in curiously;

And meet the eyes of the children,
Who eagerly look out
With cheeks that bloom like roses red,
And greet them with welcoming shout.

On the joyous Christmas morning,
In front of every door,
A tall pole, crowned with clustering grain,
Is set the birds before.

And which are the happiest, truly
It would be hard to tell;
The sparrows, who share in the Christmas cheer,
Or the children who love them well!

How sweet that they should remember,
With faith so full and sure,
That the children's bounty awaited them
The whole wide country o'er!

When this pretty story was told me,
By one who had helped to rear
The rustling grain for the merry birds
In Norway, many a year,

I thought that our little children
Would like to know it too,
It seems to me so beautiful,
So blessed a thing to do;

To make God's innocent creatures see
In every child a friend,
And on our faithful kindness
So fearlessly depend.

—CELIA THAXTER.

BIRDS

"I have seen no bird walk the ground with just the same air the crow does. It is not exactly pride; there is no strut or swagger in it, though perhaps just a little condescension; it is the contented, complaisant, and self-possessed gait of a lord over his domains. All these acres are mine, he says, and all these crops; men plow and sow for me, and I stay here or go there, and find life sweet and good wherever I am. The hawk looks awkward and out of place on the ground; the game birds hurry and skulk; but the crow is at home, and treads the earth as if there were none to molest or make him afraid.

The crows we have always with us, but it is not every day or every season that one sees an eagle. Hence I must preserve the memory of one I saw the last day I went bee-hunting. As I was laboring up the side of a mountain at the head of a valley, the noble bird sprang from the top of a dry tree above me and came sailing directly over my head. I saw him bend his eye down upon me, and I could hear the low hum of his plumage as if the web of every quill in his great wings vibrated in his strong, level flight. I watched him as long as my eye could hold him. When he was fairly clear of the mountain he began that sweeping spiral movement in which he climbs the sky. Up and up he went, without once breaking his majestic poise, till he appeared to sight some far-off alien geography, when he bent his course thitherward and gradually vanished in the blue depths. The eagle is a bird of large ideas; he embraces long distances; the continent is his home. I never look upon one without emotion; I follow him with my eye as long as I can. I think of Canada, of the Great Lakes, of the Rocky Mountains, of the wild and sounding sea-coast. The waters are his, and the woods and the inaccessible

cliffs. He pierces behind the veil of the storm, and his joy is height and depth and vast spaces.—*From Idyl of the Honey Bee.* JOHN BURROUGHS. By permission of and special arrangement with Houghton, Mifflin & Co. Publishers.

CHILDREN REPRODUCE STORY.

WINTER AND SPRING

Old Winter sat all alone in his hut beside a frozen river.

The winds were howling and shrieking, and the flowers had hid themselves away in the earth.

Even the big round sun had crept away toward the south, for he did not like Old Winter and the North.

One morning Old Winter heard a gentle tap at his door; a soft perfume came in upon the air.

"Ah! you have come, good Springtime," Old Winter said.

"Come in, the Red children will be glad that you have come. Sit down and let us talk together.

"I shall have to creep away to my own home very soon, now that you have come. You have never seen my home. It is very beautiful, I think, and it is white and shining. The waters have a beautiful roof over them. It is smooth, and one can see the river underneath sometimes; and when the sun looks upon it, it shines like silver."

"Of course, it is beautiful," said the Spring, "but I like mine better. There is no sparkling snow there; but we have sparkling waters. There are green leaves on the trees and the fields are full of flowers. When the soft wind comes, then the waters dance, and the grasses bend before it."

"But I have great power," Old Winter said, "for when I breathe, the rivers and the whole earth become hard."

"If I shake my long white locks of hair, then the earth is covered with glistening snow-flakes. The leaves drop from the trees and the flowers disappear."

"I, too, have power," said the Spring. "My voice is not very loud, but when I whisper, all the trees and the flowers hear me, though they are fast asleep. When I breathe, the grasses spring up and all the flowers burst forth to greet me. I shake my golden hair, and soft shadows fall upon the earth. The raindrops help the flowers and grasses to

come out into the sunlight; and the hearts of the Red Children are full of joy."

But already the sun had begun to creep back towards the north. He thought he heard the voice of Spring and was coming to see. He felt the softness in the air, and he smelled the sweetness.

The birds, too, thought they heard the voice of Spring, so they came and perched upon the roof of Old Winter's hut.

The rivers, too, had heard their names called; and already they were beginning to dance and sparkle.

There was a sweet odor, like new grass, in the hut; then Old Winter began to grow very still. "I am sleepy," he said.

By and by, the water dripped from his long, white hair, he grew very, very small and very weak, until at last no sign of Winter was left; and on the floor of the hut where he had been, sprang up a beautiful pink flower.

"It is a Spring Beauty!" the Red children say, and when they see it they rejoice, for they know that old Winter has crept away to his home, and that Spring has come to dwell in his place.

—DOROTHY BROOKS.

Describe winter and tell what he had to say about his home. What did spring say? What did the birds and the rivers do when they heard Spring calling? What happened when Winter grew small and weak? Describe the Spring Beauty.

ALMOST TIME

Almost time for the pretty white daisies
  Out of their sleep to waken at last,
And over the meadows, with grasses and clover
  To bud and to blossom, and grow so fast;
Almost time for the buttercups yellow,
  The ferns and the flowers, the roses and all,
To waken from slumber, and merrily listen
  To gladden our hearts at the spring's first call.

—SELECTED.

SPRING—*By Corot*

CHAPTER IV

SPRING NATURE STUDY

"What prodigies can Power Divine perform
More grand than it produces year by year,
And all in sight of inattentive man?"

In February and March we catch glimpses of the beauty and the glory ahead, when,

Earth is crammed with heaven,
And every bush alive with God,
But only he who sees,
Puts off his shoes.

—Mrs. Browning.

Nature's awakening is a revelation to young and old, and furnishes numberless beautiful lessons of purpose, protection, and order, lessons of beauty and unity by which the wisdom and power of the Creator are daily manifested. If, however, the unfolding buds, the fresh awakened flowers, and the joyous bird songs cause no thrill of delight in the teacher's soul; we may safely assert that she is not ready to guide, to influence the child, that poetic investigator whose every heart throb is a response, a greeting to the divine power that quickens the seed, the bud—all things to life and beauty.

The mystery and loveliness of this season, so full of life and promise, has been interpreted by those whose responsive insight into nature cannot be questioned and the teacher must go to them for inspiration and uplift.—Wordsworth, Tennyson, Burroughs and a host of others.

Bryant writes:

"My heart is awed within me when I think
Of the great miracle that still goes on
In silence round me—the perpetual work
Of the creation, finished, yet renewed forever."

THE VOICE OF SPRING

I come, I come! ye have called me long;
I come o'er the mountains with light and song;
Ye may trace my step o'er the waking earth
By the winds which tell of the violets' birth,
By the primrose stars in the shadowy grass,
By the green leaves opening as I pass.
I have breathed on the South, and the chestnut flowers
By thousands have burst from the forest flowers,
I have looked o'er the hills of the stormy North,
And the larch has hung all his tassels forth,
And the pine has a fringe of softer green,
And the moss looks bright where my steps have been.
I have sent through the woodpaths a glowing sigh
And called out each voice of the deep blue sky.

—Mrs. Hemans.

Find five proofs of the arrival of spring.

I LISTEN TO THE VOICE OF GOD

While blades are breaking through the sod;
Amid the greening dells and hills
I listen to the voice of God.
The earth has passed beneath the rod,
And vales are musical with rills,
While blades are breaking through the sod.

A sound of wondrous joy abroad
Forth issues from a thousand hills;
I listen to the voice of God.
I walk with joy where late I trod,
'Mid snows and rains and wintry chills;
While blades are breaking through the sod.

Oft, when in weariness I plod
Life's highway, bowed 'neath aches and ills,
I listen to the voice of God.
Reviving glory from the clod
My soul with dreams of rapture fills,
While blades are breaking through the sod
I listen to the voice of God.

—D. J. DONAHOE.

Mrs. Hemans asks:

"Have ye not *seen* Him, when through parted snows
Wake the first kindlings of the vernal green?
Have ye not *heard* Him, when the tuneful rill
Cuts off its icy chains and leaps away?
In thunders echoing loud from hill to hill?
In songs of birds, at break of summer's day?
Have ye not *felt* Him while your kindling prayer
Swelled out in tones of praise, announcing God was there?"

In the spring nature work, train the child to recognize the evidences of law, order, and sequence while studying the life story of the plant from seed to seed.

Cultivate in him an abiding friendship for the flowers, the trees, the birds—for all living things. Nature loved in youth will prove a blessing and an inspiration in mature life.

GERMINATION

Germination, one of the most fascinating phases of plant life, appeals to the children with wonderful force and they should be led to watch with interest the mysterious changes taking place during the early spring time.

"Each thing upward tends, by necessity decreed,
And a world's support depends on the shooting of a seed!"

Talk with pupils about the signs of spring; snow disappearing, birds returning, and the buds unfolding.

The Laughing Chorus will serve as an introduction to the planting of seeds.

A LAUGHING CHORUS

Oh, such a commotion under the ground
When March called, "Ho, there! ho!"
Such spreading of rootlets far and wide,
Such whispering to and fro;
And "Are you ready?" the Snowdrop asked,
"'Tis time to start, you know."
"Almost, my dear," the Scilla replied;
"I'll follow as soon as you go."
Then "Ha! ha! ha!" a chorus came
Of laughter soft and low,
From the millions of flowers under the ground—
Yes—millions—beginning to grow.

"I'll promise my blossoms," the Crocus said,
"When I hear the bluebirds sing."
And straight thereafter, Narcissus cried,
"My silver and gold I'll bring."
"And ere they are dulled," another spoke,
"The Hyacinth bells shall ring."
And the Violet only murmered, "I'm here,"
And sweet grew the air of spring.
Then "Ha! ha! ha!" a chorus came
Of laughter soft and low,
From the millions of flowers under the ground—
Yes, millions—beginning to grow.

Oh, the pretty, brave things! through the coldest days,
Imprisoned in walls of brown,
They never lost heart though the blast shrieked loud,
And the sleet and the hail came down,
But patiently each wrought her beautiful dress,
Or fashioned her beautiful crown;
And now they are coming to brighten the world,
Still shadowed by Winter's frown;
And well may they cheerily laugh, "Ha! ha!"
In a chorus soft and low,
The millions of flowers hid under the ground—
Yes—millions—beginning to grow.

—FROM EMERSON'S *Evolution of Expression.*

Let children name rootlets they see in imagination spreading far and wide. Name flowers they will be glad to see this spring. What do the flowers need in order to grow? Call to mind last autumn's study of seeds. Tell them about the life and beauty contained in a seed. Read and discuss with pupils, "Waiting to Grow" and "The Little Brown Seed in the Furrow."

WAITING TO GROW

Little, white snowdrop, just waking up,
Violet, daisy, and sweet buttercup!
Think of the flowers that are under the snow,
  Waiting to grow!

Nothing so small, or hidden so well,
That God will not find it, and very soon tell
His sun where to shine, and His rain where to go,
  To help them to grow!

—AUTHOR UNKNOWN.

THE LITTLE BROWN SEED IN THE FURROW

A little brown seed in the furrow
  Lay still in its gloomy bed,
While violets blue and lilies white
  Were whispering overhead,
They whispered of glories strange and rare,
  Of glittering dew and floating air,
Of beauty and rapture everywhere,
  And the seed heard all they said.

O, little brown seed in the furrow,
  At last you have pierced the mold;
And quivering with a life intense,
  Your beautiful leaves unfold
Like wings outspread for upward flight;
  And slowly, slowly, in dew and light
A sweet bud opens—till, in God's sight,
  You wear a crown of gold.

—IDA W. BENHAM, FROM *Arbor Day Manual.*

Awakening Life in Seeds.—Soak some of the seeds collected last fall, such as the bean, the pea, the morning-glory, the pumpkin, and the corn, and let each child discover for himself the awakening life, and watch the development of roots, stems, buds, and leaves.

Plant many seeds in window-boxes filled with clean sand, for observation during the term. Cover boxes with panes of glass till the seedlings are well started. Make the conditions different for the same kind of seeds. Keep some warm; others cool. Plant some in the dark. As soon as the first sprouts appear above the ground plant another set, and continue this plan until a series is obtained, ranging from a foot high to those just beginning to grow.

The growth of the roots may be observed by placing seeds on a piece of coarse mosquito netting, over a glass dish containing water. Seeds just touch the water.

They may also be grown on moist blotting paper or sponge for observation.

Place a moist sponge in a jelly glass containing water and cover with a large inverted glass. If the blotting paper is used it should be covered, and the seeds should not be exposed to the light while they are germinating. Pupils will discover that growing seeds need air, moisture, and warmth.

The lessons on germination are suitable for all children after they enter school. The treatment, of course, should vary according to the age and the ability of the pupils.

In the first grade, study bean (Lima) from seed to seed. Plant the Lima bean edgewise with the eye down.

In the second grade, compare the life story of the bean and the pea.

In the third and fourth years, acorn, maple, pumpkin, and others, according to the teacher's judgment.

The children should plant and care for seeds at home and

report changes in appearance from week to week. Tell the children that each seed has a story to tell and we must learn to read it correctly. Examine seeds several times daily after placing them in water and decide why they are larger and softer than the dry seeds.

Watch the changes that are taking place in the seeds planted in the sponge.

After a week or so pupils will notice the arched stems pushing up the soil in the box. Older pupils will see and feel the truth and beauty of the following lines:

Every clod feels a stir of might
An instinct within it that reaches and towers
And groping blindly above it for light,
Climbs to a soul in the grass and flowers.
—LOWELL

Why is the stem of the bean bent into a loop as it comes up to the light? Is this the way it protects the tender growing apex? Compare with the pea and corn seedlings.

Where did the bean get its first food before it had a leaf or a root outside the seed coat? Children may be led to discover that the bean has the plumule ready formed in the seed, while the morning-glory seed has not. Why? The bean stored up food enough to develop the plumule before it formed a root, while the morning-glory seed has only food enough to enable the young plant to form its roots.

Compare the bean with the pea, pumpkin, and sunflower in this respect. Observe the bean seedling backing out of the ground and straightening up—picture the plumule and the spreading leaves between the cotyledons. Compare with the pea, the pumpkin, and the corn.

Children should be led to **see** differences, not told.

Find out what parts of a plant children recognize. By this time they have observed what each part—coat, cotyledon, caulicle, and plumule, does for the plant.

Pupils watch the germination of the acorn and compare with the pine and maple seeds.

Let each pupil care for one or two plants and record by drawing the first appearance of the root, stem (caulicle), buds, leaves, etc.

How is the plumule of the bean different from that of the corn? Which of these seedlings has the greatest number of root hairs? Let each child mark off a square yard of ground at home and count the different kinds of plants it contains.

SWEET PEA

How does the pea seedling come above the ground? Do you find the pea at the end of the stem? What is the use of the coiling threads or tendrils on the plant? Children furnish sticks or some support for the peas. Leave two or three unsupported and see how they behave. They seem so eager to reach up to the sunlight. Cover one of the unsupported plants so that the sun cannot reach it.

How are the leaves arranged on the stem? What is the root doing for the plant? Measure a plant daily and see how rapidly it grows.

What is the difference in the appearance of the plant that was deprived of sunlight and those growing in the sun? The vine growing in the dark has a spindling weak stem and the leaves are small and yellowish. The other plants are strong and green; their leaves took in a gas (carbon dioxide) from the air, and the sunlight helped them to manufacture nourishing food.

Count the leaves on a plant. They have so much work to do. What is the work of the stem? The root? Root, stem, and leaves all worked together to make the flower.

Watch the bud unfolding. What insects visit the flower?

The fragrance, the color, and the form of the blossom all combine to make it very attractive.

The flower is nodding, five-parted, and the shape of the corolla resembles a butterfly. The large petal is called the banner, the two petals on the sides are the wings, and the two small petals joined in the middle are the keel petals.

"Here are sweet peas on tip-toe for a flight,
With wings of gentle flush o'er delicate white,
And taper fingers catching at all things,
To bind them all about with tiny rings."
—KEATS.

Carefully open a couple of flowers and paste on cards to show children how beautiful they are. Do not allow pupils to pull flowers to pieces.

Examine calyx; count the thread-like bodies (ten stamens) surrounding a long boat-shaped part (pistil); nine stamens are united toward the base (one brotherhood), while the tenth is separate and free.

Call attention to pollen case at the end of each stamen, and the flat pistil covered with tiny hairs. Pollen from the stamens falls on the pistil and when it reaches the seed-box the little ovules begin to grow. Watch the pod increasing in size.

Children, sketch the pea vine frequently during the term.

TEACHER, TELL THE STORY OF "THE PEA BLOSSOM."

There were once five peas in one shell; they were green, and the shell was green, and so they believed that the whole world must be green also, which was a very natural conclusion.

The shell grew and the peas grew; they accommodated themselves to their position, and sat all in a row. The sun shone without and warmed the shell, and the rain made it clear and transparent; it was mild and agreeable in broad daylight and dark at night, as it generally is; and the peas, as they sat there, grew larger and larger, and more thoughtful as they mused, for they felt there must be something for them to do.

"Are we to sit here forever?" asked one; "shall we not become hard by sitting so long? There must be something outside; I feel sure of it."

And so weeks passed by; the peas became yellow.

"All the world is turning yellow, I suppose," said they,—and perhaps they were right. Suddenly they felt a pull at the shell; it was torn off, and held in hungry hands, then slipped into the pocket of a jacket, in company with other full pods. "Now we shall soon be let out,"—said one,—just what they all wanted.

"I should like to know which of us will travel farthest," said the smallest one of the five; "we shall soon see now."

"Crack!" went the shell as it burst and the five peas rolled out into the bright sunshine. There they lay in a child's hand. A little boy was holding them tightly; he said they were fine peas for his pea-shooter. And immediately he put one in and shot it out. "Now I am flying out into the wide world," said the pea; "catch me if you can;" and he was gone in a moment.

"I," said the second, "intend to fly straight to the sun; that is a shell that lets itself be seen, and it will suit me exactly;" and away he went.

"Wherever we find ourselves we will go to sleep," said the two next; "we shall still be rolling onwards;" and they did certainly fall on the floor, and roll about before they got into the pea-shooter; but they were put in for all that. "We will go farther than the others," said they.

The last, as he was shot out of the pea-shooter, flew up against an old board under a garret window, and fell into a little crevice, which was almost filled up with moss and soft earth. The moss closed itself about him, and there he lay a captive indeed, but not unnoticed by God.

Within the little garret lived a poor woman, who went out to work every day; for she was strong and industrious. Yet she remained always poor; and at home in the garret lay her only daughter, not quite grown up, and very delicate and weak. For a whole year she had kept her bed.

Quietly and patiently she lay all day long, while her mother was away from home at her work.

PEA WOKE UP

Spring came, and early one morning the sun shone brightly through the little window, and threw his rays over the floor of the room.

Just as the mother was going to her work, the sick girl fixed her gaze on the lowest pane of the window. "Mother!" she exclaimed, what

can that little green thing be that peeps in at the window? It is moving in the wind." The mother stepped to the window and half opened it. "Oh!" she said. "There is actually a little pea that has taken root and is putting out its green leaves. How could it have got into this crack? Well, now, here is a little garden for you to amuse yourself with." So the bed of the sick girl was drawn nearer to the window, that she might see the budding plant; and the mother went out to her work.

"Mother, I believe I shall get well," said the sick child in the evening; "the sun has shone in here so brightly and warmly to-day and the little pea is thriving so well; I shall get better, and go out into the warm sunshine again." "God grant it!" said the mother. She propped up with a little stick the green plant which had given her child such pleasant hopes of life, so that it might not be broken by the winds; she tied the piece of string to the window-sill and to the upper part of the frame, so that the pea-tendrils might twine round it when it shot up. And it did shoot up; indeed, it might almost be seen to grow from day to day. "Now, really here is a flower coming," said the mother one morning. She remembered that for some time the child had spoken more cheerfully, and during the past few days had raised herself in bed in the morning to look with sparkling eyes at her little garden which contained but a single pea-plant.

A week later the invalid sat up for the first time a whole hour, feeling quite happy by the open window in the warm sunshine, while outside grew the little plant, and on it a pink pea-blossom in full bloom. The little maiden bent down and gently kissed the delicate leaves. This day was like a festival to her.

"Our heavenly Father himself has planted that pea, and made it grow and flourish, to bring joy to you and hope to me, my blessed child," said the happy mother, and she smiled at the flower.

But the young maiden stood at the open garret window, with sparkling eyes and the rosy hue of health upon her cheeks, and folded her thin hands over the pea-blossom, thanking God for what he had done.

(Ginn & Co.) —ANDERSON.

A SEED

I held a little brown flax-seed in my fingers. I dropped it on the surface of the water in my glass, upheld by a thin layer of cotton-wool. In a few days white threads descended into the water from that little seed, and a green shoot rose into the air. Delicate leaves unfolded above and the threads below became a silky tassel of roots. The pretty

plant grew and throve. Day by day the leaves opened more and more. Buds and lovely blue flowers appeared, and as the sun shone in my window upon the growing plant, seeds were born and ripened and the wonder was multiplied. All had gone on by degrees. Step by step, cell by cell, it had been built up, and bud and flower and fruit had come in due course. So I knew what to expect in my little human plants. Not the ripe seed all at once; not the perfect conduct nor the whole lesson at the first trial; but slowly, one by one, thought by thought, effort by effort, the mind and heart will grow. Surely but gradually, day after day and year after year, the child will learn and become wise and good; for this is God's eternal law, that all things grow gradually in good order, from less to more.

By Permission of Lee & Shepard. —LOUISA P. HOPKINS.

In March the teacher should distribute seeds—give instruction in planting—offer prizes for the best plant reared at home, and assist children in making flower-beds in the school yard.

SOIL

Once a week, or oftener during the spring term, arrange for "field lessons." The work of water in soil-making serves as an introduction to earth-study or geography, and can be best studied in the springtime, after the snow and the ice have disappeared, when the children can see the water at work wearing down hills, and furrowing out valleys.

The brook near the school can be studied as a type of larger streams.

Let children visit a stream after a heavy rain and find out why the water is so muddy. Which will a stream carry further, fine sand or pebbles? What colors have you seen in clay? How were the pebbles rounded and polished? Find crumbling rocks. What causes rocks to crumble? What is leaf mould?

Direct attention to the wasting sandstone, the slowly crumbling limestone, and the washing away of the river banks. Take home pebbles, crumbling rocks, etc.

The outdoor lessons should be followed by indoor discussions relating to the things studied.

Talk with pupils about the importance of soil. Animal life depends upon plant life, and plant life depends upon the existence of soil.

Review what was learned about the expansion of water when it freezes.

Pupils examine rocks out of doors, and tell what the seams or fissures are filled with. (Soil, roots, water). Suppose the seams were larger and more numerous? How can roots break rocks?

In "Boy Travelers in South America" you will find an interesting account of the way roots pull down walls in the tropics.

Shaler defines soil as the wreckage of the rocks as they wear down under the action of air, rain, and frost, the roots of plants, and the stomachs of earthworms.

Pupils, collect specimens of pebbles, clay, sand, quartz, and limestone.

Pebbles and Quartz

Show pictures of huge rocks. Let children tell what happens when water freezes in the crevices of rocks.

Children, put pieces of sharp stones in a bottle containing water, give the stones a thorough shaking backward and forward every day for a week or two, and note the result. Examine the chipped-off sand grains, under a magnifying glass. Sand grains vary in color, some being transparent, others yellow, others milky white. Sand is used in the manufacture of mortar, plaster, and glass. Tell children about the beautiful colored glass made in Venice.

Pebbles are made from sharp stones which are rubbed against other stones by moving water, making sand, mud, and gravel.

Quartz is one of the hardest of the common minerals. It is

very abundant. Try to scratch glass with it. How many colors do you find? Violet, yellow, rose, smoky, etc. The well known forms of quartz are amethyst, carnelian, flint, jasper, onyx, and agate. Pure quartz is transparent like glass—resembles diamond. Give uses of quartz.

Feldspar

Feldspar has a pearly luster. Its color is usually light, ranging from white to gray, pink, red, brown, and green. This is the mineral that gives the granites their characteristic colors.

Clay is in most cases derived from disintegrated feldspar. Porcelain, china, crockery, and bricks are made out of clay.

Feldspar is softer than quartz, harder than glass. Compare quartz with mica, and mica with feldspar. Continue the study of rocks and running water.

Show pictures of waterfalls, rapids, gorges, etc.

Read "The Cataract of Lodore" and try to imagine the wonderful work of water as a sculptor.

EARTHWORMS

He prayeth best who loveth best
All things, both great and small;
For the dear God who loveth us,
He made and loveth all.

—COLERIDGE.

Purpose of the Lesson.—To encourage outdoor observation. To call attention to one of the earliest signs of spring.

Preparation.—Talk with children about preparing the soil to make garden, the need of plowing and raking to make it fine. Tell them we must become better acquainted with a little animal that is busy in nearly all parts of the world helping to loosen the earth as the plowman does.

Field Lesson.—Let children find out where and when the

earthworm works. In what kind of soil? What does it eat? How does it crawl? Find castings on the lawn or in the garden. Estimate the quality of the soil in the castings found in a space three or four feet square.

Material and Care.—Live worms may be obtained by digging for them in damp ground; they may also be found under boards or stones that have not been disturbed for some time. Worms can be kept in a large glass jar containing moist earth covered with dead leaves. Fasten netting over jar.

Presentation—Pour cold water over a piece of glass and let children see the worms crawling. Notice from day to day what they do with the leaves. Earthworms are nocturnal, and the children will be obliged to use a lantern in order to see them at work out of doors. After a heavy rain is the best time to watch them.

Let children examine the worms in the jar. Can they see, hear, and smell? Hide a piece of onion in the bottom of the jar and see if the worms will find it. Hold a light near the head of a worm. What did the worm do? It has no eyes, but the head end can distinguish light from darkness. The worm cannot hear at all, but it has a very delicate sense of touch. Account for the number found on the sidewalks after a rain. They get lost and dry up before they find a place to burrow.

Body.—The body tapers at each end and is made up of ring-like joints. Each ring has on its under side very small bristles which help the worm to move over the ground by keeping it from slipping.

Habits.—Worms move easily in loose soil, but find it impossible to pierce through hard or close earth on account of their soft bodies. They breathe through their skin and need moisture in the air or in their surroundings. Worms devour anything that can be eaten. They burrow into the soil to a depth of from three to eight feet. They eat their way through the

ground. Their tiny eggs are found in June near the openings of the burrows.

Importance of the Work Done by Earthworms.—Shells, bones, and leaves are constantly being covered with castings and these decay and enrich the soil. They take great quantities of leaves into their burrows and convert them into vegetable mould. The fine rootlets penetrate the earth to a great depth, by means of the worm-tubes, and obtain nourishment from fresh soil. The worms sift and loosen the soil so that the rain can sink into it and supply the roots with air and moisture. It has been estimated that there are about fifty-three thousand worms in an acre of ground and that they bring up about ten tons of soil to the acre yearly. For interesting facts concerning the work and habits of earthworms read "Vegetable Mould and Earthworms," and "The Great World's Farm."

COWPER SAYS:

"I would not enter on my list of friends
(Though graced with polished manners and fine sense,
Yet wanting sensibility) the man
Who needlessly sets foot upon a worm.
An inadvertent step may crush the snail
That crawls at evening in the public path;
But he that has humanity, forewarned,
Will tread aside, and let the reptile live."

THE PUSSY WILLOW

The middle of March is a good time to surprise the "pussies."

Aim.—To emphasize protection.

Field Lesson.—Take children to the willows.

Direct attention to the signs of spring.

Material.—Branches of the pussy willow in jars of water in a cool place. It is desirable to gather twigs from several willows in order to secure the two kinds of flowers. Staminate and pistillate.

Preparation.—Call attention to the long winter's rest. Why did your mother give you warmer clothing for the winter than you had during the summer? We must examine the buds and see how they were prepared for the cold weather.

READ AND DISCUSS THE FOLLOWING POEM TO DIRECT THE CHILDREN'S THOUGHTS:

Perhaps you may think, because I am buttoned
And folded and wrapped in my little cloak so,
That I always dress this way in all sorts of weather,
With never a frill or a ruffle to show.

But it's only because I have come out so early,
That only Jack Frost and the winds are astir,
They're hard on the dresses, but under my wrappings
Is my pretty new party dress hidden with fur.

—SELECTED.

Plan of Work.—Give each child an opportunity to observe the tough, varnished scales on the outside, the silk and fur next to the scales, and the long hairs which help to protect the buds. When the buds develop call attention to the pistils on the green (pistillate) catkins and the powder on the yellow (staminate) catkins. Let children draw stems and watch their development in water. Shake some of the pollen on the catkins containing the ovules and explain the importance of this yellow powder. Remind children that the two kinds of catkins are not found on the same shrub.

How do the seeds out of doors manage to get the pollen? Pupils may suggest the wind. Lead them to see that the willow containing pistillate catkins may not be near the willow with staminate catkins and the wind might not blow in the right direction when the pollen is ripe. Take children to the willows some day and find an answer to this question.

The color and fragrance of the willows attract the attention of many insects very early in the spring before the other flow-

ers venture above the ground. Children discover many bees on the catkins; they are smaller than honey bees and their bodies, especially the head and thorax, are covered with hairs. What do they get from the flowers? What do they give? They look as though some one had sprinkled them with "gold dust." The pollen grains are as precious as gold to the flowers.

Use of Hairs on the Bee's Body.—They gather up the pollen from the stamens and take it to the pistils containing the ovules,—they exchange pollen for nectar.

Find a tree or shrub that has been cut down to the earth; the new twigs develop rapidly into strong branches.

Let children stick willow twigs into moist ground near school or home and report observations. Examine fibrous rootlets growing from nodes of the twigs kept in water. Thrust a few branches into the earth upside down. Break branches to test strength and toughness. Direct attention to color of bark and the arrangement and shape of the leaves and pods. The opening seed pods are very pretty; each seed appears with a plume of long silky hairs to help it fly away to a new home and give it a chance to become a large willow.

Characteristics of the Willow Family.—Stamens and pistils are separate and borne on different trees and shrubs.

Difficult to classify because two trees must be studied in order to decide one species, and the trees are not always near together.

The leaves are simple, feather-veined. In color, many varieties of greens, ranging from blue to yellow.

Many species are satisfied with almost any kind of soil if they have plenty of water. The willow finds its greatest commercial value in the manufacture of wicker work. The catkins appear before or with the leaves. Nearly all the willows have soft, pliant, tough wood.

Important Points to Impress:

Beauty of the catkins. Protection of buds. Leading thought. Stamens and pistils on different shrubs. How the flowers help the bees. How the bees help the flowers. Decorate board with pictures of pussy willow. Let children picture branches and catkins frequently.

Now sweet and low, the south wind blows,
And through the brown fields calling goes
"Come, Pussy! Pussy Willow!
Within your close brown wrapper stir!
Come out and show your silver fur!
Come, Pussy! Pussy Willow!"

—SELECTED.

TERMS USED IN DESCRIBING BUDS

Buds, As to Position:—

Terminal: At the end of the twig.

Lateral: Along the sides of the twig.

Axillary: In the leaf-axil; that is the upper angle between the leaf and the stem.

Adventitious: Buds produced irregularly on the branch or trunk.

Accessory: Buds clustered about the axillary buds.

Nodes are the points on the stem at which the buds are produced.

Internodes are the spaces between the nodes.

As to Arrangement:—

Opposite: Two at the same node and opposite.

Whorled: Three or more arranged around the same node.

Alternate: In ranks along the stem, not being opposite or whorled.

EASTER DRAWETH NEAR

Willow branches whit'ning 'neath the April skies;
Sodden meadows bright'ning, where the warm sun lies,
Robin Red-breast swinging, in a tree top high,
Swollen brooklets singing—Easter draweth nigh!

Tender fledgelings hushing, eager to take wing;
Trees and hedges flushing, with the joy of spring.
Crocus buds up-springing, through the cold dark sward,
Living incense bringing, to the the risen Lord.

—MARY M. REDMOND.

EASTER TIME

Preparation.—Let children get acquainted with the Pasque Flower in natural surroundings.

Review "The Laughing Chorus" and emphasize the awakening of all life after the winter's rest. Study of poem.

OUR PASQUE-FLOWER

The winter snows were hardly gone,
  When in her robes of fur
The pasque-flower came to cheer our hearts
  We ran to welcome her.

We knew her in her soft gray cloak,
  Her purple silken gown,
And in the sunshine, too, we saw
  Her dainty golden crown.

"Oh, tell us, little flower," we cried,
  "How dared you come so soon?
The winds are cold. The other flowers
  Will scarce be here till June."

"I came because the boys and girls
  Were waiting for the spring.
I knew it would seem nearer if
  I helped by blossoming.

"I wrapped me in my warm fur coat,
I donned my purple gown,
And borrowed sunshine from the skies
To wear upon my crown.

"I gathered courage then, and pushed
The soft brown earth aside;
For, since the warm spring sun had come
What need to longer hide?

"I came to tell you how God's care
Had kept the tiny seed,
And that he cares much more for you.
Will you my message heed?"

—From *Arnold's Waymarks for Teachers.*

Copyright, 1894, by Silver Burdett & Co.

In England it was once the custom to use this flower in coloring eggs for Easter. When did the flower make its appearance? How was it dressed? Why did it come? Repeat last stanza.

Bring an Easter Lily to the school-room and give the children an opportunity to feel the silent influence of this messenger of love and joy.

Christ it was who disdained not the use of objects and symbols, remembering that it was the childhood of the race. He it was who spake in parables and stories, laying bare soul of man and heart of nature, and revealing each by divine analogy. He it was who took the little ones in His arms and blessed them.

—KATE DOUGLAS WIGGIN.

Children plant bulbs and watch development. The lily appeals to the soul with more force than any other flower.

Repeat: "Consider the lilies of the field, how they grow: they labor not, neither do they spin. But I say to you, that not even Solomon in all his glory was arrayed as one of these."

The children saw the butterfly spread its wings from the chrysalis and the dragon fly come forth from the grub-case.

Is it possible that the pure white lily with its heart of gold was contained in the ugly brown bulb?

TEACHER, READ POEM TO DIRECT CHILDREN'S THOUGHTS.

EASTER

Oh! the lilies are white in the Easter light,
The lilies with hearts of gold;
And they silently tell with each milk-white bell,
The story an Angel told.

And they've whispered it long to the weak and the strong,
The rich and the poor among men;
Each Easter day till time dies away
They will tell the tale again.

In the tomb new-made where the Christ was laid,
The Angel told the story,
Of how he rose from death's repose,
The Son of Eternal Glory.

Donahoe's Magazine. —MARGARET E. JORDAN.

What story did the angel tell? Emphasize the spiritual meaning of the lilies. Explain last stanza.

Teacher, read the story of the Resurrection in the Bible. The artists and the poets will help children to realize the significance of this great event in the world's history. Compare Bethlehem and Galilee. Recall the song of the angels at Bethlehem.

THE LILY OF THE RESURRECTION

While the lily dwells in earth,
Walled about with crumbling mould
She the secret of her birth
Guesses not, nor has been told.

Hides the brown bulb in the ground,
Knowing not she is a flower;
Knowing not she shall be crowned
As a queen, with white-robed power.

Though her whole life is one thrill
  Upward, unto skies unseen,
In her husks she wraps her still,
  Wondering what her visions mean.

Shivering, while the bursting scales
  Leave her heart bare, with a sigh
She her unclad state bewails,
  Whispering to herself, "I die."

Die? Then may she welcome death,
  Leaving darkness underground,
Breathing out her sweet, free breath
  Into the new heavens around.

Die? She bathes in ether warm;
  Beautiful without, within,
See at last the imprisoned form
  All its fair proportions win!

Life it means, this impulse high
  Which through every leaflet stirs.
  Lo! the sunshine and the sky
  She was made for, now are hers!

Soul, thou too art set in earth,
  Heavenward through the dark to grow;
Dreamest thou of thy royal birth?
  Climb! and thou shalt surely know.

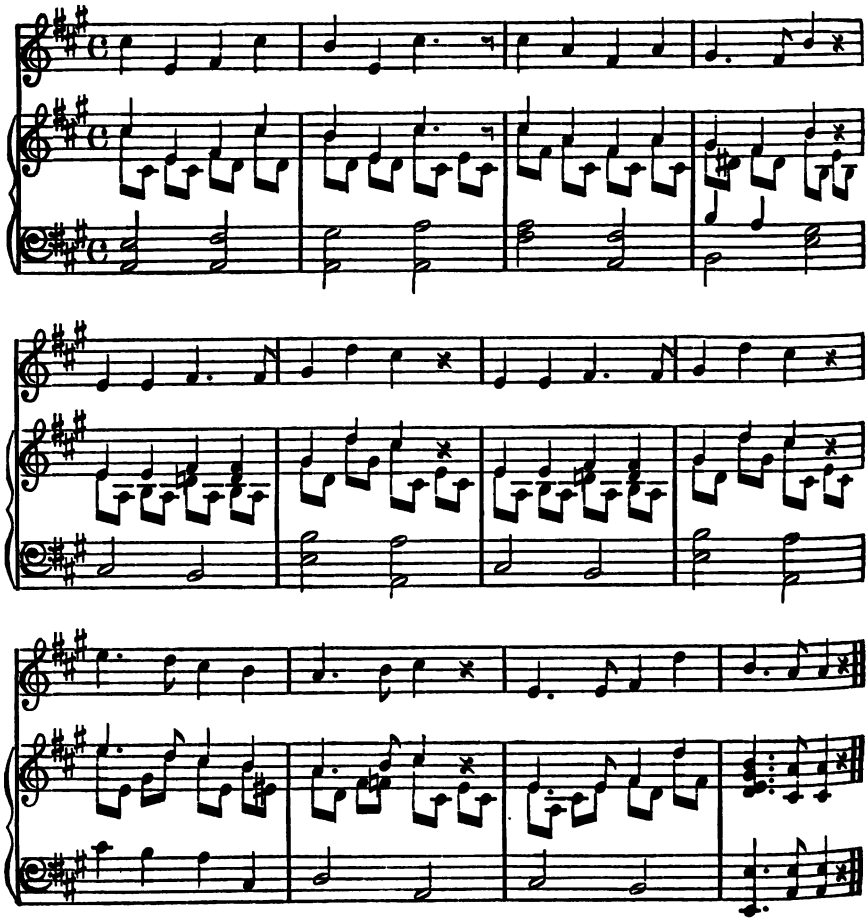
Shuddering Doubt to Nature cries,—
  Nature, though she smiles, is dumb,—
"How then can the dead arise?
  With what body do they come?"

Lo, the unfolding mystery!
  We shall bloom, some wondrous hour,
As the lily blooms, when she
  Dies a bulb, to live a flower!

—LUCY LARCOM.

EASTER

LYDIA AVERY COONLEY. JESSIE L. GAYNOR.



1. Snow-drops, waking from your sleep,
   Violets, that from blue hoods peep,
   Bloodroot, blooming by the rill,
   Stately lily, daffodil,—
   What sweet message do you bring?
   Is it only: "This is Spring?"

2. Snow-drops, violets, lilies white,
   In the answer all unite:
   "Through the mold we heard a voice
   Calling to the earth: 'Rejoice!'
   So we left the ground to rise,
   Off'ring incense to the skies."

3. Little birds the chorus swell,
   Humming bees the tidings tell,
   Butterflies lift shining wings,
   Ev'ry child with gladness sings;
   With the flow'rs rejoicing, say:
   "Christ is ris'n on Easter day!"

Permission from "Songs in Seasons," of A. Flanagan Co., Publishers.

MAKE A SPECIAL STUDY OF THIS POEM:

NATURE'S EASTER-MUSIC

The flowers from the earth have arisen,
  They are singing their Easter-song;
Up the valleys and over the hillsides
  They come, an unnumbered throng.

Oh, listen! The wild flowers are singing
  Their beautiful songs without words!
They are pouring the soul of their music
  Through the voices of happy birds.

Every flower to a bird has confided
  The joy of its blossoming birth—
The wonder of its resurrection
  From its grave in the frozen earth.

For you chirp the wren and the sparrow,
Little Eyebright, Anemone pale!
Gay Columbine, orioles are chanting
Your trumpet-note, loud on the gale.

The buttercup's thanks for the sunshine
The goldfinch's twitter reveals;
And the violet trills, through the bluebird,
Of the heaven that within her she feels.

The song-sparrow's exquisite warble
Is born in the heart of the rose—
Of the wild-rose, shut in its calyx,
Afraid of belated snows.

And the melody of the wood-thrush
Floats up from the nameless and shy
White blossoms that stay in the cloister
Of pine-forests, dim and high.

The dust of the roadside is vocal;
There is music from every clod,
Bird and breeze are the wild-flowers' angels,
Their messages bearing to God.

"We arise and we praise him together!"
With a flutter of petals and wings,
The anthem of spirits immortal
Rings back from created things.

And nothing is left wholly speechless;
For the dumbest life that we know
May utter itself through another
And double its gladness so!

The trees have the winds to sing for them;
The rock and the hill have the streams;
And the mountain the thunderous torrents
That waken old Earth from her dreams.

She awakes to the Easter music;
Her bosom with praise overflows;
The forest breaks forth into singing,
For the desert has bloomed as the rose.

And whether in trances of silence
We think of our Lord arisen,
Or whether we carol with angels
At the open door of his prison.

He will give us an equal welcome
Whatever the tribute we bring;
For to Him who can read the heart's music
To blossom with love is to sing.

—LUCY LARCOM.

What flowers have arisen? Where are they to be found? What are they doing? Repeat third stanza. What can you tell about the birds and the flowers named in the poem? What did each flower tell a bird? The birds and the flowers have many beautiful messages for poetic souls.

Wordsworth says:

The birds pour forth their souls in notes
Of rapture from a thousand throats.

Emerson writes:

"I thought the sparrow's note from heaven,
Singing at dawn on the alder bough."

"That's the wise thrush; he sings each song twice over,
Lest you should think he never could recapture
The first fine careless rapture."

—BROWNING.

"To me, the meanest flower that blows can give
Thoughts that do often lie too deep for tears."

—WORDSWORTH.

Who are the wild flowers' angels? Who sings for the trees? the rock and the hill? the mountain? Give the pictures in order. What effect has the Easter music on the earth? Give the meaning of the last two stanzas.

THE STAR THAT BECAME A LILY

Once a beautiful star came down to earth. For a long time it had watched the children at play in the green fields, and the star said, "I

love those little Red children, I would like to go down and live with them."

So one night the star shot down, down, till at last it stood out upon a big plain. The people in the wigwam village saw it, and ran to look at it.

"I have come, O good people," said the star, "to dwell with you on the earth. I love to watch you in your wigwams. I love to see you make your birch canoes. I love to watch your children at their play. Tell me, then, where I may dwell. It must be where I can see you all, and where at night I can look up to my home in the skies."

Then one chief said, "Dwell here upon the mountain top; where you can overlook the plain. The clouds will come down and rest upon the high peaks, and each morning you may greet the sun."

"Dwell here upon the hillside," said another chief, "for there the flowers grow brightest, and the sun is warmest."

"Dwell in the forest," said a third chief, "for there the sweet violets grow, and the air is cool, and the smell of spruce is in the air."

But the star thought the mountain was too far away, as it could not see the children from such a height, and it was they it wanted to be near.

The hillside, too, the star thought, was far away, and the forest, it was sure, was too dark and dreary.

But one day, the star saw a beautiful little lake. The water was very clear,—one could see the skies and the clouds in it. At night the stars shone down into its waters. The water was soft and warm, and the star was pleased to see it ripple and dance. It liked to see the sunlight glimmer on the waters.

The children loved the lake, too; they played all day on its banks, and often paddled out upon it in their little canoes.

"I will dwell right here," the star said, "for then I can be near the children."

And so, when the sun had set, the star floated down upon the waters. It sent its rays away down beneath the waters; and the Red children thought these rays took root, for the very next morning there was a beautiful lily upon the waters. Its roots reached away down into the rich earth, its petals were pure white, and it had a heart of rich yellow gold.

"No flower has a perfume so sweet," the children cried.

Then they rowed out to look at it.

"It is the star," the children said; "it will dwell with us forever, and we will call it the Lily Star."

Then the children rowed back to the shore. They did not pluck the lily, but each morning they went to see it.

"Dear, beautiful lily!" they would say.

By and by it opened wide its petals; and the air was filled with sweetness.

Then other lilies grew up around it; and after a time these Water Lilies, or Lily Stars, as the children called them, were floating on the waters of the lake everywhere.

—DOROTHY BROOKS.

Children, reproduce story after free discussion. Sketch hillside, mountain, lake, etc.

FLOWER-DE-LUCE

In the twelfth century King Louis made this flower the national emblem of France; he strewed it on his son's mantle at the coronation in the Rheims cathedral.

Iris is the classical name. Blue Flag is the common name.

Let children visit a marshy meadow some day and get acquainted with the Flower-de-luce.

Take home two or three plants.

Examine the rhizome, the strong, sword-like, parallel-veined leaves guarding the purple flower. Observe the three arching petals and the three sepals, each sepal bearing a tuft of yellow fuzz arranged to catch pollen.

Observe also three more petal-like parts, the stigmas of the three-cleft pistil.

Let older pupils study the "Flower-de-luce." Longfellow will help them to see the beauty of this common flower.

Visit the Blue Flag in its home again after having studied the poem and the legend, "Iris," and see the reeds, rushes, and dragon-flies.

THE RAINBOW QUEEN

A great many years ago, when even grown-up people were not very wise, they used to look up to the mountains and wonder if their tops reached the sky. Sometimes a big cloud would rest upon a mountain-top, and when the sun shone upon it, this cloud would look like gold. Sometimes rain would fall from the cloud, even when the sun shone upon it, and then the beautiful rainbow would shine out. By and by these people, called Greeks, began to think that a great king dwelt upon the mountain-top. They named this king Jupiter. They thought the golden cloud was his palace. Of course, there was a beautiful queen in the golden palace; they named her Juno. She had many princes and princesses about her, who loved her and were always glad to serve her; but of all the princesses, none were so beautiful as Iris. For her the queen made a rainbow bridge, and no one but Iris was allowed to step upon the beautiful arch. There are many old Greek stories about this princess and her journeys to the earth over the rainbow bridge. One of them is about a flower, that is named after her.

IRIS

Princess Iris loved the waters of the earth, for in them she could always see the bright rainbow colors of her own magic bridge. One day she wished to come down, to wander by the bright waters of the rivers and lakes. So she wrapped herself in a red and purple cloud, and stepped into her golden chariot drawn by two handsome peacocks, whose splendid tails spread out in the sun and shone like the colors in the rainbow itself. On her way, she shook water-drops from the clouds to see them sparkle in the light, as they went splashing down upon the earth. Down she came to the earth, and by the side of a lake, she stepped from her golden chariot. Here she found blue flowers, growing stately and tall. "As blue as the blue waters of the sea," she cried. She bent over the bright blue flowers, and touched their petals. Down from her hair the raindrops fell; straight down upon one petal of every flower. And there they are sparkling and shining to this very day, showing the colors of the rainbow when the warm sun shines down upon it. Soon after that some children went down to the water to play. "See, see!" they cried, "a blue flower, as blue as the blue in the rainbow. Iris herself must have been here. Here are her own

beautiful colors." And so, to this day, the tall blue flower that grows by the water's edge, half hidden among its own sword-like leaves, is called Iris, in memory of Iris, "the rainbow queen."

—Adapted From the Story as Told by MARA PRATT.

STUDY OF POEM.

FLOWER-DE-LUCE

Beautiful lily, dwelling by still rivers,
Or solitary mere,
Or where the sluggish meadow-brook delivers
Its waters to the weir!

Thou laughest at the mill, the whir and worry
Of spindle and of loom,
And the great wheel that toils amid the hurry
And rushing of the flume.

Born in the purple, born to joy and pleasance,
Thou dost not toil nor spin,
But makest glad and radiant with thy presence
The meadow and the lin.

The wind blows, and uplifts thy drooping banner,
And round thee throng and run
The rushes, the green yeomen of thy manor,
The outlaws of the sun.

The burnished dragon-fly is thine attendant,
And tilts against the field,
And down the listed sunbeam rides resplendent
With steel-blue mail and shield.

Thou art the Iris, fair among the fairest,
Who, armed with golden rod
And winged with the celestial azure, bearest
The message of some god.

Thou art the Muse, who far from crowded cities
Hauntest the sylvan streams,
Playing on pipes of reed the artless ditties
That come to us as dreams.

O flower-de-luce, bloom on, and let the river
Linger to kiss thy feet!
O flower of song, bloom on, and make forever
The world more fair and sweet.

—H. W. LONGFELLOW.

The home of this flower? Do you see the "still river"? the meadow brook? the mill-race? the great mill-wheel toiling to store up force from the river to do its great work? Observe some of the delicate fabrics in dress goods. What is the color of royalty? Without noise or worry the flower obtains strength from the river to weave a dress far surpassing in beauty the work of the mill-weaver. Why does the flower laugh at the mill?

In the fourth stanza Longfellow refers to feudal times when the majority of the people flocked to the banners of the lords or knights to serve and protect them. A lord or knight was often defended by bands of outlaws. The rushes crowd around the flower to protect it. Do they remind you of soldiers? Why? Dragon-fly tilts against the field—tilt refers to a military exercise of thrusting with a lance—a tournament. Mail —defensive armor. Iris was Juno's messenger. Read legend Iris. Muse: The sweet music played on the reed pipes beside the streams were supposed ages ago to inspire the poets. Why called flower of song? How long has it been a national emblem?

BIRDS

SWEET WARBLERS

Sweet warblers of the sunny hours,
Forever on the wing,
I love thee as I love the flowers,
The sunlight and the spring.

In the green and quiet places,
Where the golden sunlight falls,
We sit with smiling faces
To list their silver calls.

And when their holy anthems
Come pealing through the air,
Our hearts leap forth to meet them
With a blessing and a prayer.

Amid the morning's fragrant dew,
Amidst the mists of even,
They warble on as if they drew
Their music down from heaven.

—*Birds and All Nature.*

Copyright, 1900, by A. W. MUMFORD.

In order to prepare the children to watch with interest the spring work in bird land, it will be advisable to have them examine a few typical nests. They cannot fail to be impressed with the wonderful skill and ingenuity exhibited in the construction of bird homes found in every locality.

READ:

THE EMPTY NEST

We found it under the apple tree
Torn from the bough where it used to swing.
Softly rocking its babies three,
Nestled under the mother's wing.

This is the leaf all shrivelled and dry
That once was a canopy overhead;
Doesn't it almost make you cry
To look at the poor little empty bed?

All the birdies have flown away;
Birds must fly or they wouldn't have wings,
Don't you hope they'll come back some day?
Nests without birds are lonesome things.

—EMILY MILLER.

Secure, if possible, a nest made by the Baltimore oriole. Where was it found? Lead children to see the advantage of this position. Why is this little hammock so closely woven and compact at the bottom? What tools had the bird to work with? Take the nest to pieces and notice the material used. While examining the nest of this artistic weaver the children are amazed to see the knots tied so securely and the cord, hair and milkweed fibre woven together so skillfully.

The nest of the humming-bird is also a model of artistic skill, a small cup about half the size of a hen's egg, made of a white felt-like substance covered with gray lichens as beautiful as its owner. The nest of the wood pewee closely resembles the humming-bird's and is more easily found. Compare the nest of the robin or bluejay with the oriole's or pewee's nest.

Colored pictures of birds, such as those issued by Nature Study Publishing Co., will be found exceedingly valuable in familiarizing children with the bird's form, color, and environment. The metallic colors, glossy plumage, and delicate markings of many birds will be more fully appreciated by examining stuffed specimens, but as they suggest the loss of life, colored pictures and outdoor observation, combined with a study of the living specimens brought to school occasionally (pigeon, canary, parrot, and chicken), will prove more desirable for children in the lower grades.

In the spring of the year the birds wear their brightest plumage and sing their sweetest songs. Their activity while selecting a suitable spot and suitable material for the new home affords children an excellent opportunity to observe their most interesting habits at this season. Encourage children to watch daily for their arrival.

THE HUMMING-BIRD

"A flash of harmless lightning,
A mist of rainbow dyes,
The burnished sunbeam brightening,
From flower to flower he flies."

JOHN B. TABB, p. 59. Small, Maynard Co.

"Cleaving the clouds with their moon edged pinions,
High over city and vineyard and mart;
April to pilot them; May speeding after;
And each bird's compass his small red heart."

—EDWIN ARNOLD.

THE BLUE BIRD

Every one loves the bluebird. It is because he is so gentle, modest, brave, and useful. He is called the color-bearer of the spring songsters, the banner-bearer of Birdland, the minstrel of April, and Mabel Osgood Wright says he is a model citizen.

He belongs to the Thrush family.

Song.—Teach the children to distinguish his liquid note in the spring choir. Burroughs tells us that he calls, Bermuda! Bermuda! or Purity! Purity!; other admirers think the plaintive warble sounds like, Dear! Dear! Think of it! Think of it!

What message has he for your ears?

This is Eben Rexford's tribute:

THE BLUE BIRD

Listen a moment, I pray you; what was that sound that I heard?
Wind in the budding branches, the ripple of brooks, or a bird?
Hear it again above us! and see a flutter of wings!
The blue bird knows it is April, and soars toward the sun and sings.

Never the song of the robin could make my heart so glad;
When I hear the blue bird singing in spring, I forget to be sad.
Hear it! a ripple of music! sunshine changed into song!
It sets me thinking of summer when the days and their dreams are long.

Winged lute that we call a blue bird, you blend in a silver strain
The sound of the laughing water, the patter of spring's sweet rain.
The voice of the winds, the sunshine, and fragrance of blossoming things.
Ah! you are an April poem, that God has dowered with wings!

—EBEN EUGENE REXFORD.

Appearance.—Let children discover the following facts:

The bluebird is smaller than the robin and larger than the canary. The throat and breast are a reddish brown with white feathers on the under side of the body and the back and wings are a clear bright blue.

Nest.—It chooses a bird house made by some friend, a hole in a tree or post, the deserted nest of a woodpecker; almost anything that will afford protection will do.

The eggs are light blue, four to six in number.

Food.—Fruit, spiders, and all sorts of injurious insects.

It generally remains with us until very late in autumn. Before it leaves us its song is very sad and plaintive.

Compare the bluebird with the robin.

Give gems of bird poetry; connect the work with the reading, language and literature.

Who called the bluebird the angel of the spring? The peace harbinger? Who said, "The warble of this bird is innocent and celestial like its color?"

Read "Wake Robin"—Burroughs.

IN APRIL

April is here!
Listen, a bluebird is caroling near!
Low and sweet is the song that he sings,
As he sits in the sunshine with folded wings,
And looks from the earth that is growing green
To the warm blue skies that downward lean,
As a mother does, to kiss the child
That has looked up into her face and smiled.
Earth has been sleeping and now she wakes
And the kind sky-mother bends and takes
The laughing thing in her warm embrace.
And scatters her kisses over its face,
And every kiss will grow into a flower
To brighten with beauty a coming hour.

—Eben Eugene Rexford.

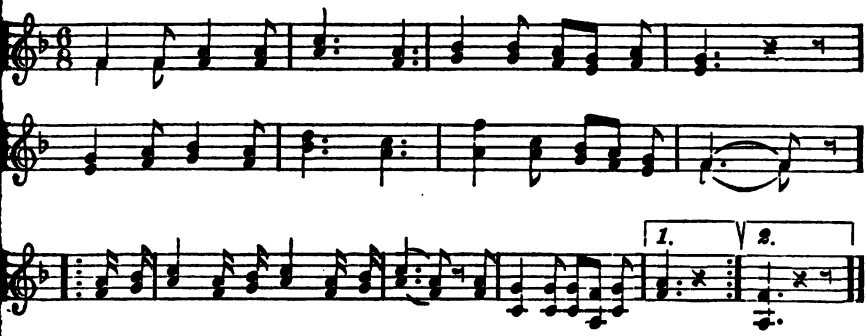
THE BLUE BIRD

High up in the clear sky flies the bluebird, among the first to herald the coming spring. He flies swiftly above the clouds, in sunshine and in storm, singing a joyous carol. His wings are the color of the deep blue sky, and here he and his tribe stay with their cheerful song from March to October, first to come, and last to go, and always finding something to be happy about, even in the early spring or the late autumn. He is like the cheerful and trustful soul that pursues its onward flight above the clouds of trouble through the clear sky of love and trust. It sings its sweetest songs when the cold winds of discouragement and disappointment blow about its path. It reaches its home, at last, safe and happy because trusting in God's care, and finds its shelter and food, though the whole earth looks empty and barren. It flies at the call of God, who never misleads it, but guides it through the trackless air safely to the very place where it would go. * * * *

By permission of Lee & Shepard. —LOUISA P. HOPKINS.

BIRDIES IN THE GREENWOOD

FROM KOEHLER A. WEBER.



1 Birdies in the greenwood
Sing so sweet and clear,
Of the merry sunshine
And the flowers so dear.

La, la, la, la, la, la, la, la, la,
La, la, la, la, la, la
La, la, la, la, etc.

2 Birdies in the greenwood
Built their little nest,
Never do disturb them.
In their place of rest.—**Cho.**

3 Birdies in the greenwood
Sing themselves to sleep,
With each head tucked under,
Snug and warm they keep.—Cho.

From *Songs, Games and Rhymes,* by EUDORA HAILMANN. By permission of Milton Bradley Co. and Thomas Charles, Chicago, Publishers.

SONG SPARROW

The song sparrow in his plain brown dress will return very early in an ecstacy of delight. What news does he bring? Thousands of visitors are on the way dressed in the loveliest colors. Song sparrow is telling the trees, the children in particular, and everyone in general.

How is he dressed? Above, he is brown and gray with many stripes. Beneath, gray, slightly striped with dark forming two spots on his breast; his head, wings, and tail are brown. He has a short, thick, brown bill.

Habits.—He is a sweet singer and pours out his song early and late until he changes his dress in August. In a few weeks he begins again and continues until November. The nest is made of dry grass and is placed in a secluded spot on the ground or in a low bush. The four or five speckled eggs are very pretty.

READ:

"BIRDS CANNOT COUNT"

First Boy.

Six eggs there were, in the nest of a bird,
Under four brown wings' protection.
"Now, 'birds can't count,'" said John, "I've heard."
And so, without saying another word,
He took one for his collection.

Second Boy.

Five eggs there were in the sheltered nest
Karl knew from John's direction,
"As 'birds cannot count'" said Karl "'tis best
To take one of these to go with the rest
Of the kinds in my collection."

Third Boy.

Four eggs there were in the nest on the tree.
Said Dick: "Upon reflection,
As 'birds cannot count,' I think it will be
No harm to them and just right for me,
To take one for my collection."

Fourth Boy.

Three eggs there were in that harassed nest;—
And I don't know what connection
There was to the thoughts in the poor birds' breast
If birds cannot count,—but they left the rest,
For anybody's collection.

All.

Oh, egg-collectors, don't you suppose
You might have some slight objection,
Though you should forget how to count, if those
Who look at your treasures, should, as they chose,
Each take one from your collection.

—*Popular Educator.*

It is claimed by the Directors of the New York Zoological Park that our birds have decreased forty-six per cent. during the past fifteen years in thirty states and territories.

According to this report it is certainly time to make an extra effort to draw the birds closer about our homes by providing shallow dishes of water, nesting places, materials for nest building, etc.

Olive Thorne Miller tells us that a robin has been known to dip herself in water, fly directly into the dust of the street and then pick off the mud from her feet and feathers. A pan of

mud placed in a convenient spot would save the bird this trouble. Strings, twine, yarn, etc. would also be appreciated for building purposes by many of our sweet singers.

It is to be hoped that Shelly's prediction may soon be fulfilled:

"No longer now the winged habitants,
That in the woods their sweet lives sing away,
Flee from the form of man; but gather round,
And prune their sunny feathers on the hands
Which little children stretch in friendly sport
Towards these dreadless partners of their play."

—*From Demon of the World.*

ROBIN

In March, remind children to watch for Robin Redbreast with his calm, dignified air. Report when and where he is first seen.

Describe his spring dress.—Olive gray above, with long, slender, brown wings; brick-red breast; throat, black and white; head and tail black, and bill, yellow.

Song.—He is up before daybreak and makes the woods ring with his cheerful song—"Cheerily, cheerily, cheer up, cheer up!" What is his call note? "Quick! Quick!" Many people imagine that he says during the day, "Do you think what you do?" Children listen for his rain song.

Habits.—Call attention to his movements. He hops or runs along in the yard and turns his pretty head from right to left and listens. Every few minutes he pulls up a worm. His flight is rapid, straight, and decided. He eats grubs, worms or insects until the fruit is ripe. His legs are of medium length and his four toes are placed on a level. He is a percher.

Nest.—Children watch, if possible, the robins carrying sticks and straws for the foundation, then the mud for plastering, and

finally moss or grass for lining. How long did it take to build the nest? Did they begin early? Did they sing while at work? Where do they build? In a hedge, strong vine or tree? Teacher sketch nest with eggs. Blue-green. Generally four in number.

CHILDREN MEMORIZE POEM:

THE BUILDING OF THE NEST

They'll come again to the apple-tree—
Robin and all the rest—
When the orchard branches are fair to see,
In the snow of the blossoms drest;
And the prettiest thing in the world will be
The building of the nest.

Weaving it well, so round and trim,
Hollowing it with care,—
Nothing too far away for him,
Nothing for her too fair,—
Hanging it safe on the topmost limb,
Their castle in the air.

Ah! mother-bird, you'll have weary days
When the eggs are under your breast,
And shadow may darken the dancing rays
When the wee ones leave the nest;
But they'll find their wings in a glad amaze,
And God will see to the rest.

So come to the tree with all your train
When the apple blossoms blow;
Through the April shimmer of sun and rain,
Go flying to and fro;
And sing to our hearts as we watch again
Your fairy building grow.

—MARGARET SANGSTER.

What is the character of our little friend? Cheerful, confiding, industrious, and brave. Fights jays, squirrels, and

other enemies in defense of young. Sings early and late, even in the rain. Builds near our homes, sometimes in porches.

Teacher, tell stories and read poems about the robin. Lead children to see the birds with the poet's eye.

ROBIN'S RETURN

Robin on the tilting bough,
Redbreast rover, tell me how
You the weary time have passed
Since we saw and heard you last.

"In a green and pleasant land,
By a summer sea-breeze fanned,
Orange trees with fruit are bent,—
There the weary time I've spent."

Robin, rover, there, no doubt,
Your best music you poured out;
Piping to a stranger's ear,
You forgot your lovers here.

"Little lady, on my word,
You do wrong a true-hearted bird!
Not one ditty did I sing,
'Mong the leaves or on the wing,

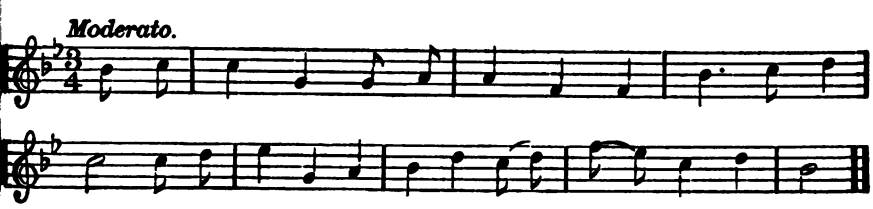
In the sun or in the rain;
Stranger's ears would list in vain,
If I ever tried a note,
Something rose up in my throat.

" 'Twas because my heart was true
To the North and springtime new;
My mind's eye, a nest could see
In yon old, forked apple tree!"

—EDITH THOMAS.

NOTE.—It is said that the robin does not sing during its winter stay in the South.

WE ARE RED BIRDS



We are red birds, we are red birds,
So fearless and bold;
We are out in all weather,
And fear not the cold.

We are blue birds, we are blue birds,
So pretty and light;
We are busy, we are happy,
Be the sky dark or bright.

We are orioles, we are orioles;
Our nests are hung high,
Where the soft breezes sing us
A soft lullaby.

We're canaries, we're canaries,
We care not to roam;
We love our kind friends,
And stay always at home.

We are humming-birds tiny,
Deep purple our breasts,
'Mid the blossoms so fragrant
We build our small nests.

—From *Songs for Little Children,* ELEANOR SMITH.

By permission of Milton Bradley Co. and Thomas Charles, Chicago, Publishers.

CRADLE SONG

What does little birdie say
In her nest at peep of day?
"Let me fly," says little birdie;
"Let me rise and fly away."
"Birdie, rest a little longer,
Till the little wings are stronger."
So she rests a little longer,
Then she flies away.

What does little baby say
In her bed at peep of day?
Baby says, like little birdie,
"Let me rise and fly away."
"Baby, sleep a little longer,
Till the little limbs are stronger,"
If she sleeps a little longer,
Baby, too, shall fly away.

—ALFRED TENNYSON.

BIRD GAME

(For this game divide the children into six groups, letting each group represent one kind of bird. The children, in their seats, sing or recite the first verse together and then all fly away to some selected part of the school-room. The first group flies back to place, sings or recites its verse and then sits down. The other groups follow in order, and when all are seated the last verse is given in concert, after which all the children fly freely about the room for a time, playing birds, *being* birds, and dramatizing bird life according to inclination and ability).

Brave little Snow-birds in white and gray!
Summer is coming so *we* cannot stay!
The place for our nesting is far in the North,
You think it is cold here, but it is our South.

We are Tree Creepers, so speckled and small,
We were almost the last to go south in the fall;
We were almost the first to come back, and you see
We go creeping around and around up the tree.

We are Grackles, so shiny and black;
We wonder if farmers are glad we are back!
They will hear our gay chatter from night until morn
As we keep a sharp eye on their wheat and their corn.

And now Robin Redbreast comes back with the spring.
On the high tree-tops he'll whistle and sing.
He knows everybody is happy to see
Both him and his mate on her nest in the tree.

Blithe, bonny Bluebirds the south wind has sent,
Each hoping to find a new bird-house to rent.
Or else a snug hole in a post, fence or tree,
Where wee baby Bluebirds well sheltered may be.

Gay flashing Orioles, whistling clear,
Tell you that springtime is certainly here.
We wait for the elm-leaves to cover the nest
On the high swaying branches which we love the best.

Swift darting swallows way up in the sky
Tell that the summer is very close by.
Frosts must be over and warm weather come
Before we risk leaving our safe southern home.

Now the days are full of music!
  All the birds are back again;
In the tree-tops, in the meadows,
  In the woodlands, on the plain.
See them darting through the sunshine!
  Hear them singing loud and clear!
How they love the busy springtime,
  Sweetest time of all the year!

—KATHERINE BEEBE. *Primary Education.*

SNAILS

Aim.—To lead children to observe habits and adaptation of structure to environment.

To awaken an interest in soft-bodied animals. (Mollusks).

Preparatory Work.—Talk with pupils about the kinds of material used in building homes for people, birds, and other animals. Ash children to look under leaves, stones, and logs in damp, shady places for snails and shells.

Material.—Living snails, together with some of the leaves or other food they like, in a glass jar with damp earth.

Deserted shells of different sizes and colors.

Plan of Work.—Direct attention to the color and form of snail shells. Are people's houses all of the same color? same shape?

Children group shells according to color. The owners of the white houses have been dead some time, no doubt, because their homes look as though they needed painting.

Are people's houses all made of the same material? Pour strong vinegar or acid on different substances, as granite or quartz. What happens when it is poured on the snail shell? It bubbles or effervesces. This tells us that the material consists of lime-carbonate.

Shape.—The shell is spiral. Each turn is called a whorl; the largest one is the body whorl. The spaces between the whorls are the sutures, and the upper part is the spire. The apex is the tiny shell that covered the young snail. Place the shell containing the living snail upon a piece of warm glass, or in a glass of tepid water, and the little creature will be likely to make his appearance.

> The frugal snail, with forecast of repose,
> Carries his house with him where'er he goes;
> Peeps out, and if there comes a shower of rain,
> Retreats to his small domicile amain.

Touch but a tip of him, a horn,—'tis well,—
He curls up in his sanctuary shell.
He's his own landlord, his own tenant; stay
As long as he will, he dreads no quarter-day;
Himself he boards and lodges; both invites
And feasts himself; wheresoe'er he roams
Knock when you will, he's sure to be at home.

—CHARLES LAMB.

How does the snail walk? Look on the under side of the glass and watch his broad muscular foot which creeps along with a gliding motion. As it travels it covers the glass with slime or mucus from its body.

How does it eat? Let children feed the snail peavine, toadstool, cabbage, etc. It has a long, ribbon-like tongue covered with points that serve the purpose of teeth. The snail moves the ribbon backward and forward against the upper jaw until he cuts his food.

Where are the eyes? Notice the four feelers, two of which are much shorter than the others. The eyes are situated at the ends of the long feelers.

How does the snail breathe? The little creature has a breathing hole under the edge of the shell, which leads to a small sac or lung in the mantle.

Habits.—Lives on decaying leaves and other vegetable matter and can easily be found crawling about after a rain. The young hatch from eggs. The shells of young snails are transparent. In the fall the snail withdraws into its shell, seals up the opening by a layer of slimy mucus which forms a thin membrane. It hibernates during the winter and when spring comes it opens its door and stretches out its head.

Lead children to see how well adapted the hard shell is to a soft bodied animal.

Children, bring cowry, conch, and other ornamental shells from their homes and observe their exquisite beauty.

"See what a lovely shell!
Small and pure as a pearl.
Frail, but a work divine,
With delicate spire and whorl;
A miracle of design.
The tiny cell is forlorn
Void of the little living will
That made it stir on the shore;
Did he stand at the diamond door
Of his house in a rainbow frill?
Did he push when he was uncurled
A golden foot of a fairy horn,
Thro' his dim water world?" —TENNYSON.

Uses.—In European countries, especially in France and Italy, several kinds of snails are used for food and are very frequently pictured on the sign-boards of restaurants. In Paris it is estimated that one hundred thousand pounds of snails are eaten daily. In Pompeii great heaps of shells may be seen.

POND SNAILS

The pond snail may be kept in a jar of water. The general form of the shell is like a cone and is composed of whorls. This snail has two feelers and the eyes are situated at the base of the feelers. The little animal finds it necessary to come to the surface of the water for fresh bubbles of air occasionally.

Compare with garden snail. Let children picture shells. The clam, mussel and oyster shells divide into two parts and are called bivalves. The snail and its relatives having but one shell are called univalves.

I have seen
A curious child who dwelt upon a tract
Of island ground, applying to his ear
The convolutions of a smooth-lipped shell;
To which, in silence hushed, his very soul
Listened intensely; for from within were heard
Murmurings whereby the monitor expressed
Mysterious union with its native sea. —WORDSWORTH.

STUDY OF POEM.

THE CHAMBERED NAUTILUS

This is the ship of pearl, which, poets feign,
Sails the unshadowed main,—
The venturous bark that flings
On the sweet summer wind its purpled wings
In gulfs enchanted, where the Siren sings,
And coral reefs lie bare,
Where the cold sea-maids rise to sun their streaming hair.

Its webs of living gauze no more unfurl;
Wrecked is the ship of pearl!
And every chambered cell,
Where its dim dreaming life was wont to dwell,
As the frail tenant shaped his growing shell,
Before thee lies revealed,—
Its irised ceiling rent, its sunless crypt unsealed!

Year after year beheld the silent toil
That spread his lustrous coil;
Still, as the spiral grew,
He left the past year's dwelling for the new,
Stole with soft step its shining archway through,
Built up its idle door,
Stretched in his last-found home, and knew the old no more.

Thanks for the heavenly message brought by thee,
Child of the wandering sea,
Cast from her lap, forlorn!
From thy dead lips a clearer note is born
Than ever Triton blew from wreathed horn!
While on mine ear it rings,
Through the deep caves of thought I hear a voice that sings:—

Build thee more stately mansions, O my soul,
As the swift seasons roll!
Leave thy low-vaulted past!
Let each new temple, nobler than the last,
Shut thee from heaven with a dome more vast,
Till thou at length art free,
Leaving thine outgrown shell by life's unresting sea!

—OLIVER WENDELL HOLMES.

The poet once wrote a letter to the Cincinnati school children in which he said, "If you will remember me by 'The Chambered Nautilus,' 'The Living Temple' and 'The Promise,' your memories will be a monument I shall think more of than any bronze or marble." "The Chambered Nautilus" was his favorite. He wrote the last stanza in the album of Princess Louise.

Why called Nautilus? Why "poets feign"? "The animal frequents deep waters, and though it is occasionally found at the surface, it sinks upon the least alarm, so that it has been rarely captured, although the shell is so common."—Elements of Zoology. Why "venturous bark"? It is not afraid to sail on its purple wings into enchanted gulfs. Sirens—sweet singers in the ocean that were supposed to lure to destruction. Not afraid of coral reefs or mermaids. What was the result of this fearlessness and daring?

"Why "dim, dreamy life"? The Nautilus and all other mollusks have few nerves. Compare with the activity of birds. Why "irised ceiling"? Iris rainbow queen—note color of shells. "Silent toil" and "lustrous coil"—explain. What did the poet hear while studying the shell? Heavenly message. Tritons were the bold trumpeters of the sea-god Neptune.

What is the message? The meaning? It told the poet to grow. Let every year be a mansion with a more beautiful dome. Live nearer to God. Then death will be leaving an outgrown shell. Commit last stanza.

THE FROG

Material.—A live frog in a large glass jar containing a sod of grass. Cover jar with coarse netting.

Some frog's eggs in a jar of water. Care should be taken not to place too many eggs in the jar and not to expose eggs to direct sunlight.

Pupils should be encouraged to assist the teacher in procuring material for class work. In March or April tiny dark eggs enclosed in a gelatinous membrane may be found in the shallow water of ditches and along the edges of ponds.

Habits and Structure.—Let the children bring in a variety of live insects. Many destructive kinds can easily be found. Watch the frog eating his dinner. How many insects did he catch in a minute?

The tongue is very curious. It is two-forked and has its base in front instead of at the back of the mouth. The tip points toward the throat and is covered with a thick, sticky substance resembling glue.

Notice the broad, short body and the large triangular head.

Let the children study the frog's movements in a large dish of water. Direct attention to the limbs,—hind limbs long, each foot five-toed and webbed; the fore limbs short, each foot four-toed. Watch the frog leaping when taken from the water. Compare movements of rabbit and frog.

Let children notice the difference in color of the back and the under portion of the body. Compare with color of surroundings near ponds and streams. Who can think of a use for the green and brown coloring? Blends with surroundings. How many have seen frogs diving into the mud to escape from their enemies? How many have seen them eating worms?

Notice the large projecting eyes and the small piece of thin, tight skin back of each eye, stretched over a hard ring that forms the ear-drum.

Breathing.—The frog breathes by means of his skin as well as by his lungs. He closes his lips, expands the cavity of the mouth, and draws air in through his nostrils. He swallows air as a person swallows food, and if his mouth were kept open any length of time he would suffocate.

Where are the frog's teeth? Open his mouth carefully and

pass your fingers along the upper and lower jaws and find out.

Why do frogs frequent ponds and ditches? Without plenty of moisture the skin dries and shrinks and the frog soon dies.

In the winter they find a resting place in the mud, and sleep there securely until the return of spring. How many have seen the frog shedding its coat? Imitate the frog's croak. Notice the position a frog takes while at rest; while jumping.

Frogs destroy large numbers of slugs and insects and serve in their turn as food for other animals. Fishes, birds and snakes devour thousands of tadpoles and frogs. In Europe and America frogs' legs are sold for food.

In studying the life history of the frog we seem to have before us the life of two different animals. Its place of abode, its habits, its food, and even its structure, are different in the early period of its existence from what they are later. Develop facts by questioning.

Eggs.—The children have been watching the development of the eggs.

What is the use of the jelly-like mass in which the eggs are deposited? It not only protects the eggs from cold and from being washed away, but it serves as food for the life it contains. As soon as the children see the little wigglers in the jar they should provide them with a few water plants.

Notice the small tufts (gills) on each side of the head which enable the tadpole to breathe in the water.

Observe change in the shape of the body, appearance of the legs, hind ones appearing first. The body continues to change shape, the tail is absorbed, the legs grow longer, and in place of gills, lungs are formed; our tadpole has become a frog and is ready for the land.

Compare tadpole with frog in regard to structure and habits.

If two jars were arranged, one with frogs' eggs and the other with toads' eggs, (toads' eggs are found in strings and are some-

what darker in color than frogs' eggs) the comparison would certainly prove interesting.

A record of the dates of changes in appearance from day to day placed on the blackboard will lead to careful observation. Compare frog with toad.

Let children study frogs and toads in natural environment.

Watch to see the toad shedding his warty skin and report observation.

THE WIND

Lead children to talk about the wind. What is wind?

From which direction is the wind blowing to-day? In what way does spring differ from winter?

What work has the wind to do in spring?

The wind melts ice and snow; brings the rain clouds; wakens the life in roots, seeds, and buds, and drives the clouds away.

What work has the wind to do in autumn?

Let children tell about the wind shaking down the leaves and nuts, scattering seeds, etc.

When does a windmill turn most rapidly? Of what use is the wind to sailors? What results to air, water, and iron when heated? Why do soap bubbles rise? Name all the uses of wind that you know. Question pupils to incite continued observation.

CHILDREN MEMORIZE:

THE WIND

I saw you toss the kites on high
And blow the birds about the sky;
And all around I heard you pass,
Like ladies' skirts across the grass—
O wind, a-blowing all day long!
O wind, that sings so loud a song!

I saw the different things you did.
But always you yourself you hid.
I felt you push, I heard you call,
I could not see yourself at all—
O wind, a-blowing all day long!
O wind, that sings so loud a song!

O you that are so strong and cold,
O blower, are you young or old?
Are you a beast of field or tree,
Or just a stronger child than me?
O wind, a-blowing all day long!
O wind, that sings so loud a song!

—ROBERT LOUIS STEVENSON.

By Permission of Rand, McNally & Co.

CHILDREN MEMORIZE:

SWEET AND LOW

Sweet and low, sweet and low,
Wind of the western sea,
Low, low, breathe and blow,
Wind of the western sea!
Over the rolling waters go
Come from the dying moon and blow,
Blow him again to me;
While my little one, while my pretty one sleeps.

Sleep and rest, sleep and rest,
Father will come to thee soon;
Rest, rest, on mother's breast,
Father will come to thee soon;
Father will come to his babe in the nest,
Silver sails all out of the west
Under the silver moon;
Sleep, my little one, sleep, my pretty one, sleep.

—TENNYSON.

FOR REPRODUCTION AFTER DISCUSSION:

ORPHEUS, A MYTH OF THE SOUTH WIND

In the land of Thrace lived, years ago, one who was called Orpheus. He was the sweetest singer ever known. His voice was never loud, but low and sweet and soft.

When men heard this voice all anger ceased, and they thought only thoughts of peace.

Orpheus went into the woods one day and took nothing but his lyre with him.

No quiver of arrows was on his back nor hunting spear at his side.

He sang and sang till the birds flew down on the ground about him, and seemed to think that a creature with such a voice must certainly be another kind of bird.

A wildcat came slyly creeping between the trees, trying to catch the little feathered friends. Orpheus took his lyre and the wildcat became as tame as the birds. They all followed Orpheus farther into the forest.

Soon, from behind a rock, a tiger sprang to attack the wildcat. The birds and the wildcat called to Orpheus. When he saw the trouble he took his lyre again and, while he sang, the tiger came trembling and purring to his feet, and the birds, the wildcat, and the tiger followed Orpheus into the forest.

He sat down by a tree to rest and the honey bees came and showed him where their honey was hidden in the tree. He fed his friends and himself, and the tiger led the way to the river, where there was the purest water.

Trees bent low before him, and young trees tore themselves from the ground and followed in his train.

Foul waters parted, so that Orpheus and his band might pass through unharmed, for they knew no longer any evil thing.

Before they reached the river of pure water, to which the tiger was leading them, a lion, fierce with hunger, sprang madly at his old enemy.

Orpheus took his lyre and played so wonderfully, that even the pine trees sighed with sorrow, and the lion loosed his hold on the tiger, and his voice changed from a growl to a wail, and he, too, followed the sweet singer of Thrace. At the river, birds, wildcat, tiger, and lion drank together with Orpheus, with not one thought of harming each other.

"We are tired," said the birds. "Let us stay here by this river," and Orpheus agreed. The birds flew to the trees, while the others tried to rest on the huge rocks by the shore, but these were jagged and rough. They would give no rest to anyone.

When Orpheus began to play, the hardest rocks were stirred. They rolled over and over into the river, and in their places the softest beds of white sand were ready for them all. Orpheus rested, with the lion and the tiger for his night watchers, and the wildcat asleep in the tree with the birds.

In the morning, the lyre sounded again, and the strange company wandered away, happy to be near Orpheus. The three wild beasts had fed together on the river mussels and forgot that they had been life-long enemies.

Orpheus had said, before he entered the forest, that he was tired of men and their quarrels; that wild beasts were easier to tame than angry men; and so he had found it these two days in the forest.

He took his lyre and played and sang a sweet wild song of love and peace, and, overhead, the leaves and branches of the oaks danced and waved for joy of living. Not one growl, not one quarrel was heard even where the echoes of the music went, for even the rocks answered the voice of Orpheus, and everything was at peace.

Then came the sound of the hunting dogs. The lion raised his shaggy head, but put it down again. A green light came into the eyes of the tiger and of the wildcat. The dogs came nearer. Orpheus played on his lyre and the dogs came and lay down at his feet, but the hunters went home without their prey. That night Orpheus led them all back to the paths where he found them, and went home to his cave in Thrace.

For years, hunters told, over their camp fires, strange stories of a tiger and a lion who lived together in the deep forest, and of a wildcat with eyes like a pet fawn.

Sometimes, even in these days, it seems as if Orpheus were singing again.

When the wind strikes the trembling wires there comes sweet music. The pine trees sigh, and leaves and branches of the forest trees dance as in the days when Orpheus first went into the woods of Thrace.

When the South wind blows, sounds like the lyre of Orpheus come to us from these trembling leaves.

When the South wind comes, Earth's voices become low and sweet, and the birds sing soft melodies to greet its coming.

The old books tell us that Orpheus was but the South Wind.

—MARY CATHERINE JUDD.

(Rand, McNally & Co.) Adapted.

SPRING FLOWERS

Stedman says of Lowell: "It does me good to see a poet who knows a bird or flower as one friend knows another, yet loves it for itself alone."

Approach the spring flowers with the higher thought of their symbolism.

"They sleep in dust through the wintry hours,
They break forth in glory with the spring's warm showers."

Here is a sweet poem which will help the children to appreciate the loveliness of the anemone when they find it nodding to them in its home in the woods.

Nothing sweeter is to me, than the wind anemone,
Lifting up her fair, pink face, in some lonely, wildwood place.
Children in the April days, when you search the hillside ways,
Search the valleys through and through, for buttercups and violets blue.
Here and there you'll surely see, pretty wind anemone,
In her simple, pale green gown, and her dear eyes looking down.
Then with me I pray you say: sweetest flower I've found to-day,
Type of grace and purity, lovely wind anemone!

By MARY GRANT O'SHERIDAN.

Have several plants dug up carefully and taken home as a contribution to the wild-flower garden in the school-yard. If children cultivate flowers they will soon learn to appreciate their beauty.

ANEMONE

This plant has a slender stem and three compound leaves, forming a pretty vase for the one white flower tinged with pinkish purple. The anemone has no petals. Let children ex-

amine seeds and root-stock (rhizome). Discuss work of root, stem, leaf, and flower. Sketch plant. Repeat poem on "Flowers" by Mary Howitt.

THE BLOODROOT

Children find this frail flower in April in the damp woods.

Examine the rhizome or root-stock growing horizontally, filled with red, acrid juice. Leaf comes up from the ground clasping the flower-bud. The blade is rounded, margin lobed, and base deeply heart-shaped.

Flower loses its sepals as soon as it opens. The pure white petals open only in the sunshine. Sketch the plant and compare it with some flower previously studied.

THE BLUE VIOLET

I know blue modest violets,
Gleaming with dew at morn—
I know the place you came from,
And the way that you were born!
When God cuts holes in heaven,
The holes the stars look through,
He lets the scraps fall down to earth,
The little scraps are you.

—PHOEBE CARY.

Request children to look for violets early in the spring, and see who will be first to bring one to school.

Field Lesson.—Home of the violet?

Why did the leaves come before the flowers?

The leaves, with the help of the sun, prepare food for the flowers and other parts of the plant.

Take home several plants and observe their growth in the school-yard. Describe root, leaf, and flower.

Children sketch and paint the violet.

Hamilton Gibson says:

"We cannot all be scientists or explorers, but we can at least learn to lend an answering intelligent welcome to those little faces that smile at us from among the grass and withered leaves, that crowd humbly about our feet, and are too often idly crushed beneath our heel. The darkest pathless forest is relieved of its gloom to him who can nod a greeting with every footstep; who knows the pale dicentra that nods to him in return; who can call by name the peeping lizard among the moss, the pale white pipe among the matted leaves, or even the covering mould among the deep debris."

—From *Highways and Byways.*

Copyrighted in 1882 by Harper and Brothers.

CHORUS OF THE FLOWERS

I am the honeysuckle with my drooping head,
And early in the spring time I don my dress of red.
I grow in quiet woodlands, beneath some budding tree;
So when you take a ramble, just look at me.

I am the dandelion, yellow, as you see,
And when the children see me they shout for glee.
I grow by every wayside, and when I've had my day
I spread my wings so silvery, and fly away.

When God made all the flowers, he gave each one a name;
And when the others all had gone, a little blue one came,
And said, in trembling whisper, "My name has been forgot,"
Then the good Father called her Forget-me-not.

A fern the people call me, I'm always clothed in green;
I live in every forest—You've seen me oft I ween.
Sometimes I leave the shadow to grow beside the way;
You'll see me as you pass some nice, fine day.

I am the gay nasturtium, I bloom in gardens fine;
Among the grander flowers, my slender stalk I twine.
Bright orange is my color, the eyes of all to please.
I have a tube of honey for all the bees.

I am the little violet, in my purple dress;
I hide myself so safely, that you'd never guess
There was a flower so near you, nestling at your feet;
And that is why I send you my fragrance sweet.

—LUCY WHEELOCK.

JACK-IN-THE-PULPIT

(INDIAN TURNIP.)

By the time Jack-in-the-Pulpit makes his appearance we realize the force of the following lines:

The year's at the spring
And day's at the morn;
Morning's at seven;
The lark's on the wing;
The snail's on the thorn;
God's in his heaven—
All's right with the world.

—ROBERT BROWNING.

In this lesson emphasize the symbolism of flowers and lead pupils to image Whittier's poem.

Preparation.—Informal talk with children about the work of the sun and the rain in waking up the flowers. Which flowers answered the call first? How many of the children have become acquainted with the little flower-preacher?

Field Lesson.—Visit Jack in his home, give him a cordial greeting and thank him for making his appearance so early. Find out about his home life, his friends, and his work.

Direct attention to the beauty of his surroundings; carpet green, decorated with many colors; ceiling blue, white, and gray—constantly changing.

Why called Jack-in-the-Pulpit?

After the children have become acquainted with the flower and discussed its environment they will enjoy the poem.

JACK-IN-THE-PULPIT

Jack-in-the-pulpit preaches to-day
Under the green trees just over the way.
Squirrel and song-sparrow, high on their perch,
Hear the sweet lily-bells, ringing to church.

Come, hear what his reverence, rises to say,
In his low, painted pulpit, this calm Sabbath day.
Fair is the canopy, over him seen,
Penciled by Nature's hand, black, brown and green.

Green is his surplice, green are his bands,
In his queer little pulpit, the little priest stands.
In black and gold velvet, so gorgeous to see,
Comes with his bass voice, the chorister bee.

Green fingers playing, unseen on wind-lyres—
Low singing bird voices—these are his choirs.
The violets are deacons—I know by the sign
That the cups which they carry are purple with wine;

And the columbines bravely as sentinels stand
On the lookout with all their red trumpets in hand.
Meek-faced anemones, drooping and sad;
Great yellow violets, smiling out glad;

Buttercups' faces, beaming and bright;
Clovers, with bonnets—some red and some white;
Daisies, their white fingers half clasped in prayer;
Dandelions, proud of the gold in their hair;

Innocents,—children, guileless and frail,
Meek little faces upturned and pale;
Wildwood geraniums, all in their best,
Languidly leaning, in purple gauze dressed;—

All are assembled this sweet Sabbath day,
To hear what the priest in his pulpit will say.
Look! white Indian pipes on the green mosses lie!
Who has been smoking profanely so nigh?

Rebuked by the preacher, the mischief is stopped;
But the sinners, in haste, have their little pipes dropped.
Let the wind, with the fragrance of fern and black birch,
Blow the smell of the smoking, clean out of the church.

So much for the preacher; the sermon comes next.
Shall we tell how he preached it and what was his text?
Alas! like too many grown-up folks who play
At worship in churches, man builded to-day,

We heard not the preacher expound or discuss;
But we looked at the people, and they looked at us.
We saw all their dresses, their colors and shapes,
The trim of their bonnets, the cut of their capes.

We heard the wind-organ, the bee and the bird,
But of Jack-in-the-Pulpit we heard not a word.

—WHITTIER'S *Child Life*.

Examine the pulpit, the canopy, the decorations. Are all the canopies "penciled" alike? Do you see "sentinels" here? "lily bells?" How many of the flowers named in the poem can you find? Which is your favorite? Why? What message do you think Jack has for the flowers and trees in his neighborhood? They seem well pleased, even the great trees bow approvingly.

Do you hear the music? wind lyres? the bird choir?

Children tell what they think the birds say. "Cheer up! cheer up! Spring of the year. Quick! Quick!" etc.

Dig up two or three flowers in different stages of development and plant in a window box. Jack likes damp soil and a shady nook. After an informal talk about the plant as a whole, direct attention to the work of root, stem, leaves, and flower. The underground part of the plant is enlarged into

"Every flower to a bird has confided
The joy of its blossoming birth—
The wonders of its resurrection
From its grave in the frozen earth.

'We arise and we praise Him together
With a flutter of petals and wings,
The anthems of spirits immortal
Rings back from created things.'"

a solid bulb called a corm. It contains starchy matter and is acrid in taste. Let children picture the plant as a whole.

Our little declaimer is shaded by an arched roof and also by the large green leaves. Encourage the children to study the plants in their true home—damp soil in the woods. Observe the small flies that exchange pollen for nectar. Note the frill of fine hairs that point toward the honey cells. How will the fly get out of the flower?

The flowers that have seed cases will soon have berries.

Watch the plants and find the red berries after awhile.

The Flower.—The spadix bears the flowers. In some flowers the spadix contains pistils only, and some, stamens only. The showy envelope (spathe) serves as a "sounding board" for the little preacher. Sounding boards are often seen in churches over pulpits to increase the resonance of the speaker's voice. Jack always has a crowd of listeners.

The starch in many species of this plant is used as food. It furnished the stiffening for the immense lawn ruffs worn in the days of Queen Elizabeth.

THE ROSE

Aim.—To develop a love for a flower that is interwoven with all poetry and art—the queen among flowers.

To learn about the plant as a whole, the relation and work of its parts and its history.

Preparatory Work.—Lead pupils to talk about the beauty of flowers. Read poems to give direction to their thoughts. Help pupils to interpret:

> "Earth is crammed with heaven,
> And every bush alive with God,
> But only he who sees
> Puts off his shoes."
> —BROWNING.

In May, direct children to observe the shrub, find and report where it grows, general appearance, environment, height of shrub, kind and arrangement of leaves, appearance of buds, etc. Two or three days before the

field lesson a few questions may be asked which can be answered only by a study of the plant in its home.

Field Lesson.—Observe plant as a whole. Give each child something definite to find out for himself. Give a few general questions to all the children. Find out how many of this plant's neighbors the children know. Which is the most useful? Which is the most beautiful? Recall the lessons on apple blossoms. Tell children that the rose and the apple blossom are members of the same family. Let children discover resemblances and differences. Find a shrub well filled with buds and blossoms. By conversation lead pupils to discover the beauty of color, form and use. Observe visitors. Has the plant enemies? Dig up two or three rose bushes and take them to the school-room or school-yard for study. The parts of the plant should be considered from the standpoint of function.

Root.—Is a rose bush hard to pull? Examine root and review function.

Stems.—Uses, height, shape, size, color, compare prickles with the thorns of the thorn apple.

Leaves.—Uses of leaves, arrangement on stems, kind, leaflets venation, etc.

Flowers.—Number, position. Describe the flower, parts of corolla, calyx, stamens and pistils.

Fruit.—Examine the fleshy red fruit, generally called hip.

Examine the thorns or prickles.

What is their use? Rabbits peel bark from trees and shrubs in the spring time. Would they be likely to injure shrubs with thorns?

Expression.—Children, sketch plant as a whole. Paint branch containing leaves, buds and blossoms. Children commit:

"The rose has one powerful virtue to boast,
Above all the flowers of the field;
When its leaves are all dead and its fine colors lost,
Still how sweet a perfume it yields."

Compare the wild rose with garden varieties. Tell children that the rose was a great favorite with the Greeks and Romans. It was customary for warriors to wear wreaths of roses. Nero caused showers of roses to be sprinkled on his guests at banquets. This flower suggested silence and a rose hanging over a guest table was a hint that conversation was to be "sub rosa." In later years the rose was dedicated to the Madonna and in Dante's Paradise she is called the "Mystic Rose." The Attar of Roses, an oil of great fragrance, is distilled from this flower. Forty thousand flowers are required to make an ounce, which sells for one hundred dollars. About one hundred and twenty species of roses grow wild in the whole world, while the garden varieties are numbered by thousands.

Pupils picture roses related to the bush. Let children observe a beautiful rose and teacher read:

AND YOU SWEET ROSE

Ah! crimson rose,—deep fused with gold,
Your perfumed heart rare secrets hold!
Unfold your petals, flower most fair,
And tell me what lies hidden there!
Your rosy lips—what would they speak?
What says the dew-drop on your cheek?
Within your heart lurks there a tear,
The while you smile upon me, dear?
Smile on, smile on, while yet you may—
Have no regrets for yesterday!
Live for to-day, my crimson rose!
To-morrow, ah! Your radiance goes
Forth with the sands in Time's frail glass—
And you, sweet rose, must fade—alas!

Not from my memory shall you die—
Within my breast enshrined you'll lie
Forever more. * * *

—AGNES HELEN LOCKART.

A week ago the sparrow was divine;
The bluebird shifting his light load of song
From post to post along the cheerless fence,
Was as a rhymer ere the poet come;
But now, O rapture! sunshine winged and voiced,
Pipe blown through by the warm wild breath of the West
Shepherding his soft droves of fleecy cloud,
Gladness of woods, skies, waters, all in one,
The bobolink has come, and, like the soul
Of the sweet season vocal in a bird,
Gurgles in ecstasy we know not what
Save June! Dear June! Now God be praised for June.

From Under the Willows.—LOWELL.

FERNS

Visit the woods with pupils in May or early June and see the growing ferns. A few tufts, root-stock and all, should be taken to the school-room.

The Osmund Fern is very common. Wordsworth says:

That tall fern,
So stately of the queen Osmunda named
Plant lovelier, in its own retired abode
On Grasmere's beach, than Naiad by the side
Of Grecian brook.

The root is of many fibers with branches numerous, short, and spreading.

The stem is subterranean, a thick dark colored rhizome living many years (perennial).

When starting from the ground in early spring each leaf or frond, as it is called, is rolled from the top inward and downward, gradually unfolding as it grows.

Observe the brown wool which serves to protect the leaves against changes of temperature.

The fern has no flowers. It is reproduced by means of spores which are borne on the leaflets.

Compare with Maiden Hair Fern and with flowering plants.

In what particulars do they agree? differ?

Plant ferns near school and watch development. Remember the kind of soil they like best.

Picture ferns.

THE GRASSES

SONG OF THE GRASS BLADES.

"Peeping, peeping, here and there,
In lawns and meadows everywhere;
Coming up to find the spring,
And hear the robin redbreast sing,
Creeping under children's feet,
Glancing at the violets sweet,
Growing into tiny bowers,
For the dainty meadow's flowers:—
We are small, but think a minute
Of a world with no grass in it."

The grasses are by far the most useful of all plants. They are everywhere to be seen carpeting meadows, hills and valleys with their soft beautiful green. Our cereals—wheat, oats, rye, barley and Indian corn—are simply cultivated grasses.

Field Lesson.—Visit a grass plot. Let children make a collection of pretty grasses for the school-room table.

Count the number of stalks growing in a square foot of meadow.

What part of the stalk is the hardest and strongest? On what part of the stem are the nodes closest together? Break a stem. Have all the grasses hollow stems?

The jointed, hollow stem is called a culm. Can you find branching culms? Have grasses flowers? Are the flowers fragrant? bright colored? Are they visited by insects? Watch and decide. Examine the leaves. Compare shape and venation with leaves previously studied.

Dig up some of the sod, take home, wash soil out of it and examine roots.

Children, name different places where grasses are found growing.

"Here I come creeping, creeping everywhere;
By the dusty roadside,
On the sunny hillside,
Close by the noisy brook,
In every shady nook,
I come creeping, creeping everywhere."

The grasses, by their many roots, hold the soil together and prevent it from being washed away—most grasses are perennials. Find the tiny stamens in the chaff-like scales? Find pistils. Most of the grasses are fertilized by the wind. They furnish food and shelter for cattle, horses, sheep, birds and insects.

Timothy is one of the very common varieties. The flowers grow on a long spike, cylindrical in shape. The root looks like a small bulb. Picture and compare with clover.

Timothy seed was brought to this country from Europe many years ago by a man named Timothy Herd.

Sweet Vernal Grass.—Examine root, culm, leaves and flowers. The internode is very long, the leaf blade and sheath are very short.

Note the adaptation of the flowers to wind-fertilization—the long stamens and stigmas—the beautifully balanced tremulous anthers. Compare Timothy with Sweet Vernal Grass.

THE DANDELION

"There surely is a gold mine somewhere underneath the grass,
For dandelions are popping out in every place you pass.
But if you want to gather some you'd better not delay,
For the gold will turn to silver soon and all will blow away."

—SELECTED.

The dandelion's golden discs may be found near the home and school from early spring until late in autumn and children admire this common flower as much as many older people dislike it.

Preparatory Work.—Give children definite questions to answer by studying the plant. Let them pull up a dandelion. Was it hard to pull? What change takes place after it is taken from the earth unless kept in water? Cover a growing plant in the yard and compare its appearance after a couple of weeks with one growing in the sun. Examine the flowers after dark. Children tell why they like the dandelion. They have curled the hollow stems, made chains of the blossoms, and by blowing away the seeds found out when "mother calls."

Material.—Two or three plants in different stages of development growing in window boxes. Children observe changes from day to day. A couple of whole plants in glass jars of water.

Root.—Direct attention to the strong central root and the number of branches extending in every direction. Compare root of a plant that has formed seed with one that has not. Why has one so much milky juice and the other so little? The plant that has ripe seed has a spongy root. Milky juice used in making seeds.

Sum up Uses of Root

Holds the plant firmly in the earth.

Central thickened root stores up food for all parts of the plant.

The fine rootlets take up nourishment from the earth.

Leaves.—Lead children to discover that the leaves form a rosette around the buds and flowers. The leaf is oblong in shape and the margins are cut into large lobes.

Let children find dandelions growing among high weeds and compare with those growing in open places; the leaves are flat on the ground in open places, and extend upward to catch the sun's rays among the tall weeds.

Call attention to the large vein in the middle of the leaf to guide rain to the roots. Show by experiment that growing leaves give off watery vapor. Fit a piece of oilcloth or heavy paper under the leaves of a plant growing in the sunshine and cover with a glass jar; moisture collects on inner surface of jar. Recall experiment with morning-glory. Watery vapor passes through the breathing pores of the leaves.

Sum up the Work of Leaves

They protect the buds and flowers. Direct water to the roots.

Breathe for the plant.

With the help of the sun they make food for the plant.

The seeds are very dainty, but the strong old trees will send a warm blanket of leaves, and later the snow will cover leaves and seeds until the warm sun and the spring rains awaken them from their long sleep. Read "November," by Alice Cary.

THE FLOWER

"Bright little dandelion, downy yellow face
Peeping up among the grass with such gentle grace,
Minding not the April wind blowing rude and cold,
Brave little dandelion with a heart of gold."

The heart of gold is a pretty center for the rosette.

Watch the dandelion's visitors. Children keep a record for a week of the different insects they find on the flower. The bees like the dandelion because the nectar is easily obtained

from the tubes of the florets. How do they pay for the nectar? When they visit a flower in search of food they carry a precious dust called pollen from one flower to another that needs it in order to develop the best seed. If pollen is not obtained from another flower the dandelion ovules manage to get it from the plant on which they grow. This process of self-pollination, in case cross-pollination (pollen from one flower to another of the same kind) is not secured, accounts for the great number of dandelions to be found. The stem takes the flower up to the sun when it is necessary, is hollow, and has a bitter taste.

Children, discover the habit of the flower in closing at night and upon the approach of rain to save the nectar, also the involucre closing upon the fading corolla while the seeds are ripening, and becoming convex to hold up the seeds so as to catch the wind when they are ready to fly. Children notice that after the flower withers, a white, downy mass appears, the silky hairs spread apart and a beautiful white sphere rivals the golden yellow flower. Count the number of seeds on a head. A light puff of wind will start them on their journey. Children blow seeds from the receptacle and see how they sail; try to imagine where the silk wings will take them.

O dandelion yellow as gold,
  What do you do all day?
I just wait here in the tall green grass
  Till the children come to play.

O dandelion yellow as gold,
  What do you do all night?
I wait and wait till the cool dews fall
  And my hair grows long and white.

And what do you do when your hair is white
  And the children come to play?
They take me up in their dimpled hands
  And blow my hair away.

—SELECTED.

Summary

The flowers close in unfavorable weather.

The flowers close while seeds are ripening.

The bright color attracts the insects.

The flower stem (scape) grows upwards to give the seeds a chance to fly away. Determined to grow near our homes.

Change in shape of receptacle after the disappearance of the blossom.

The small, green bracts protect buds at night.

Teacher, draw plant as a whole, directed by pupils in order to lead them to observe carefully. Erase, and let children draw and paint the dandelion.

Sum up uses of root, stem, leaves, and flowers. Again impress interdependence in nature.

Tell children that the dandelion belongs to a very noted family and has a great many distinguished relatives. They grow in all parts of the world and comprise about one-tenth of all the flowering plants. (Aster, golden-rod, sunflower, thistle, chrysanthemum, dahlia, marigold, and many others.) Compare dandelion with chrysanthemum.

Uses of Dandelion

Beautifies the earth at least half the year. Leaves used for food. Root used for medicine. Blossom has nectar for insects.

Tell story of the Pot of Gold.

I suppose you have heard of the pot of gold that was hidden at the end of the rainbow. No doubt there are people in the world who think it is there yet, but it is not, for a long, long time ago, somebody found it. Indeed, nobody knows how in the world it happened because a great many people have searched and searched for it and finally decided that the rain-

"There's a dandy little fellow
Who dresses all in yellow,
In yellow with an overcoat of green.
With his hair all crisp and curly
In the spring time bright and early,
A tripping o'er the meadows he is seen."

SELECTED.

bow has no end. This is the story. A very, very selfish man found the gold and resolved to hide it where no one would ever find it. So one night he put the money in a sack and hurried away to the woods to hide it. There was a hole in the sack and the man did not know that one by one the gold pieces fell in the meadow. When he discovered that all his money was gone, you may be sure he hurried back to find it.

He stooped to pick up the bright gold coins, but was very much disappointed to find bright yellow flowers instead of money. How did it happen?

Indeed, I do not know. I only know that yellow flowers give joy to the children, and selfish people are never joyous or happy.—ADAPTED.

MEMORIZE:

TO THE DANDELION

Dear common flower, that grow'st beside the way,
Fringing the dusty road with harmless gold,
First pledge of blithesome May,
Which children pluck, and, full of pride, uphold,
High-hearted buccaneers, o'erjoyed that they
An Eldorado in the grass have found,
Which not the rich earth's ample round
May match in wealth, thou art more dear to me
Than all the prouder Summer-blooms may be.

* * * *

My childhood's earliest thoughts are linked with thee,
The sight of thee calls back the robin's song,
Who from the dark old tree
Beside the door, sang clearly all day long,
And I, secure in childish piety,
Listened as if I heard an angel sing
With news from Heaven, which he did bring
Fresh every day to my untainted ears,
When birds and flowers and I were happy peers.

Thou art the type of those meek charities
Which make up half the nobleness of life,
Those cheap delights the wise
Pluck from the dusty wayside of earth's strife;
Words of frank cheer, glances of friendly eyes,
Love's smallest coin, which yet to some may give
The morsel that may keep alive
A starving heart and teach it to behold
Some glimpse of God where all before was cold.

Full of deep love thou art, yet not more full
Than all thy common brethren of the ground,
Wherein, were we not dull,
Some words of highest wisdom might be found;
Yet earnest faith from day to day may cull
Some syllables, which, rightly joined, may make
A spell to soothe life's bitterest ache,
And ope Heaven's portals, which are near us still
Yea, nearer ever than the gates of Ill.

—LOWELL.

LEGEND OF THE CHRYSANTHEMUMS, OR CHRIST FLOWERS.

It was Christmas Eve in the Black Forest. The whirling snow touched the tree tops; the starry flakes clung to the branches or fluttered down, pure as rose petals wafted about by the breath of angels. Soon the frozen earth was hid from view and a great white world waited, in solemn expectation, the coming of the Christ-Child. Silence lay upon the forest. The charcoal burners tended their smoldering fires and dreamed of home or, with simple faith, listened for the shepherd's message and the angels' song.

When the midnight hour was nigh, a sound broke the stillness, the wail of a child in distress.

"'Tis the cry from Bethlehem," said Johann reverently. "The Christ-Child is born."

"No child of the Black Forest would be about to-night?" asked Hans, uneasily. "It might not be one of our little children?" "Not so," said Michael; "content thee, Hans, thy little ones snug in their cot, dream of the angels, while thy good frau guards their sleep. It is as Johann says, 'the echo from Bethlehem.'"

Hans was silent, but presently stole away into the snow-wreathed depths of the forest. A voice in his heart was urging him on.

"May the star of Bethlehem guide me aright," he prayed. "If a child

be abroad this holy night, lead me, dear God, to Thy little one." Again the wail of distress smote upon his ear; a sob was the answer to his prayer; and stooping down, the charcoal burner lifted from the snow a babe scantily wrapped in swaddling clothes. It's feeble strength was almost spent, so placing it in his breast, Hans sped through the forest toward his home.

The hausmutter sat by her babes, her face, beautiful with mother-love, radiant in the glow of the Christmas lights burning on the humble tree, and so Hans found her.

"I have brought thee one more, Gretchen," he said as he placed the babe on her bosom. "Succor it for the Christ-Child's sake."

"Who was born to-night," answered the mother gently, and her love flowed out to the waif, warming it back to life.

The slumbering children stirred and wakened, and seeing the stranger, rose from their cots, and presently the hut rang with their rejoicing. The lights on the tree twinkled like stars. The children bore their guest toward it, loaded him with its choicest gifts, and played about him merrily, Hans and Gretchen looking on, a great content in their hearts. Suddenly a radiance, not of earth, illumined the humble abode; the waif was encircled by a glory that deepened and spread, till the charcoal burner's hut became as an ante-chamber of heaven. Hans and Gretchen fell on their knees in adoration. The Babe they had harbored was passing from their vision, floating upward as if borne by angels' wings. His tiny hands outspread in parting benediction. The children wept for the loss of their playmate.

"Hush thee, my darlings," whispered the mother. "Know you 'twas the dear Christ-Child, who came to us and hath returned to Heaven. To-morrow thy father shall show thee the spot where he found the Holy Babe."

When the morrow came Hans led the little ones into the forest and where had been a bed of snow, lo! flowers bloomed, great waxen blossoms with hearts of gold and petals like silken floss!

"The Christ flowers!" cried little Gretta, and kneeling before them, as at a shrine, the peasants solemnly recorded a vow to succor each Christmas day some poor child in honor of the Holy One, who had been their guest.

And so in the Black Forest, is still held this legend of "How the Chrysanthemums or Christ Flowers Came."—MARY BLANCHE O'SULLIVAN.—*Donahoe's Magazine; by permission of the author.*

THE APPLE TREE

"Doth thy heart stir within thee at the sight
Of orchard blooms upon the mossy boughs?
Doth their sweet household smile waft back the glow
Of childhood's morn—the wondering fresh delight
In earth's new coloring, then all strangely bright
A joy of fairyland?"

Aim.—To make the child realize that beautiful stories can be read from trees as well as from books.

To impress and reinforce the out-of-door lessons by literature.

Preparation.—Lead pupils to talk about the gifts they like best. Tell them that our trees produce numberless gifts every year that we prize very highly. Let children name trees that have gifts for the birds and for the squirrels. Gifts for man. Ask them to tell why the apple tree is so great a favorite. They will be likely to suggest many reasons.

Field Lesson.—Visit the apple tree with pupils very early in the spring before there are any visible signs of growth. Get acquainted with the tree and its surroundings. Compare its height, its mode of branching and its general appearance with one of the evergreens studied during the winter. Ask questions that can be answered only by examining the tree.

Read "Talking in Their Sleep" to direct the children's thoughts.

"You think I am dead," the apple tree said,
"Because I have never a leaf to show—because I stoop,
And my branches droop, and the dull gray mosses over me grow!
But I'm all alive in trunk and shoot; the buds of next May
I fold away, but I pity the withered grass at my root."

"You think I am dead," the quick grass said,
"Because I have parted with stem and blade? But under the ground
I am safe and sound, with the snow's thick blanket over me laid,
I'm all alive, and ready to shoot, should the spring of the year
Come dancing here—but I pity the flower without branch or root."

"You think I am dead," a soft voice said,
"Because not a branch or root I own! I have never died,
But close I hide, in a plumy seed that the wind has sown,
Patient I wait through the long winter hours; you will see me again—
I shall laugh at you then, out of the eyes of a hundred flowers."

—Edith Thomas.

Request children to visit the tree daily, examine the branches and report changes in the appearance of the buds. Place a branch in a jar of water and let children watch the buds unfolding.

READ AND DISCUSS

"AN APRIL WELCOME"

Come up, April, through the valley,
In your robes of beauty drest,
Come and wake your flowery children
From their wintry beds of rest;
Come and overblow them softly
With the sweet breath of the south;
Drop upon them, warm and loving,
Tenderest kisses of your mouth.

Touch them with your rosy fingers,
Wake them with your pleasant tread,
Push away the leaf-brown covers,
Over all their faces spread;
Tell them how the sun is waiting
Longer daily in the skies,
Looking for the bright uplifting
Of their softly-fringed eyes.

* * * * *

Come up, April, through the valley,
Where the fountain sleeps to-day,
Let him, freed from icy fetters,
Go rejoicing on his way;
Through the flower-enameled meadows
Let him run his laughing race,
Making love to all the blossoms
That o'erlean and kiss his face.

—PHOEBE CARY.

What flowers have opened their eyes? How many kinds of plants are to be found near the apple tree? What birds sing in its branches?

Second Field Lesson.—Where were the leaves and the buds when we made our first visit? What has caused such a differ-

ence in the appearance of the tree? Lead children to talk about the tree's helpers—soil, rain, air, and sunshine.

Impress the lessons of mutual dependence and mutual helpfulness. Let children tell what man does for a fruit tree. He plants the tree; he loosens the soil so that the rain can reach the roots; he trims and grafts the tree; he protects it by destroying its enemies, caterpillars, worms, etc. Children tell what they know about planting trees. Question parents and others.

Read and discuss and let older pupils commit the first three or four stanzas of "Come Let Us Plant the Apple Tree."

COME LET US PLANT THE APPLE TREE

Cleave the tough greensward with the spade;
Wide let its hollow bed be made;
There gently lay the roots, and there
Sift the dark mold with kindly care,
And press it o'er them tenderly—
As, round the sleeping infant's feet,
We softly fold the cradle-sheet;
So plant we the apple tree.

What plant we in this apple tree?
Buds, which the breath of summer days
Shall lengthen into leafy sprays;
Boughs where the thrush with crimson breast,
Shall haunt and sing and hide her nest;
We plant upon the sunny lea,
A shadow for the noontide hour,
A shelter from the summer shower,
When we plant the apple tree.

What plant we in this apple tree?
Sweets for a hundred flowery springs
To load the May wind's restless wings,
When from the orchard row he pours
Its fragrance through our open doors;
A world of blossoms for the bee,

Flowers for the sick girl's silent room,
For the glad infant sprigs of bloom,
We plant with the apple tree.

What plant we in this apple tree?
Fruits that shall swell in sunny June,
And redden in the August noon,
And drop, when gentle airs come by,
That fan the blue September sky,
While children come, with cries of glee,
And seek them where the fragrant grass
Betrays their beds to those who pass,
At the foot of the apple tree.

—WILLIAM CULLEN BRYANT.

What does the apple tree give man in return for all his care? Visit the tree again with pupils when it is in full bloom. The delicate colors, the fragrance, the hum of insects, and the songs of birds all combine to delight the senses. Help children to appreciate the beauty of the apple tree. By questioning lead pupils to describe calyx, corolla, stamens, and pistils. Note the number of flowers in a cluster, the arrangement on the stem, etc. Examine leaves, length of petiole, arrangement on branch, shape of leaf, etc. Draw and paint an apple branch.

Discuss the Work of the Tree.—The root takes food from the soil; the trunk and branches carry food from the root and leaves to the flowers; the leaves take carbon dioxide from the air, and out of this gas and water make starch, set free ogygen, and give off moisture.

THE FLOWER

There's a wedding in the orchard, dear,
I know it by the flowers;
They're wreathed on every bough and branch
Or falling down in showers.

—MARY MAPES DODGE.

The flower beautifies the earth and makes seed. The apple tree sends forth a continuous murmur after it blossoms. Let

children watch the bees at work and get acquainted with their ways. We are told that a single swarm has been known to gain twenty pounds in weight while the tree is in bloom. Do the bees help the apple tree? Encourage children to watch the beautiful corollas blowing away. Examine a branch frequently and note the growth of the apples.

Recall the appearance of the tree in early spring. Review the influence of physical environment,—man's work, the tree's work. Lead children from nature to the Author of nature. The Creator controls and directs all. Whittier's poem will help to impress this thought.

O, Painter, of the fruit and flowers,
We own Thy wise design,
Whereby these human hands of ours
May share the work of Thine!

Apart from Thee we plant in vain
The root and sow the seed;
Thy early and Thy later rain,
Thy sun and dew we need.

And North and South and East and West
The pride of every zone,
The fairest, rarest, and the best
May all be made our own.

In earliest shrines the young world sought
In hill-groves and in bowers,
The fittest offerings thither brought
Were Thy own fruits and flowers.

And still with reverent hands we cull
Thy gifts each year renewed;
The good is always beautiful
The beautiful is good.

—WHITTIER.

Sum Up Uses of the Apple Tree

It beautifies the earth. It furnishes nectar for the bees.

Birds build their nests among its branches. The fruit is valuable.

Cider and vinegar are made from the apples.

Study the apple in the fall after having watched its growth from the beginning. Cut the apple across through the center.

How many parts or cells in the seed box?

Count the seeds. Tell the number and the arrangement in each cell. How are the seeds protected? By the skin; by the pulp which is the fleshy, ripened cup or calyx; and by the core, which is the wall of the seed-box. How can you help to awaken the life in the apple seed?

How do you know when the seeds are ripe?

In what way does the brilliant color help the seeds? Read "Apple-Seed John" for children.

APPLE-SEED JOHN

Poor Johnny was bended well-nigh double
With years of care, and toil, and trouble;
But his large old heart still felt the need
Of doing for others some kindly deed.

"But what can I do?" old Johnny said;
"I, who work so hard for daily bread?
It takes heaps of money to do much good;
I am far too poor to do as I would."

The old man sat thinking deeply awhile,
Then over his features gleamed a smile;
And he clapped his hands with childish glee,
And said to himself, "There's a way for me!"

He worked and he worked with might and main,
But no one knew the plan in his brain.
He took the ripe apples in pay for chores,
And carefully cut from them all the cores.

With a bag full of cores he wandered away,
And no man saw him for many a day.
With knapsack over his shoulder slung,
He marched along and whistled or sung.

With pointed cane, deep holes he would bore,
And in every hole he placed a core;
Then covered them well and left them there,
In keeping of sunshine, rain, and air.

Whenever he'd used the whole of his store,
He went into cities and worked for more;
Then he marched back to the wilds again,
And planted seed on hillside and plain.

Weary travelers, journeying West,
In the shade of his trees find a pleasant rest;
And they often start with glad surprise,
At the rosy fruit that round them lies.

And if they inquire whence came such trees,
Where not a branch once swayed in the breeze,
The answer still comes, as they travel on,
"These trees were planted by 'Apple-Seed John.'"

—LYDIA MARIA CHILD.

TREE PLANTING

What does he plant who plants a tree?
  He plants the friend of earth and sky;
He plants the flag of breezes free;
  The shaft of beauty hovering high;
  He plants a home to heaven a-nigh,
For song and mother—croon of bird
In hushed and happy twilight heard,—
The treble of heaven's harmony,—
These things he plants who plants a tree.

What does he plant who plants a tree?
  He plants cool shade and tender rain,
And seed and bud of days to be,
  And years that fade and flush again;

He plants the glory of the plain;
He plants the forest heritage;
The harvest of a coming age;
The joys that unborn eyes shall see,—
These things he plants who plants a tree.

What does he plant who plants a tree?
He plants in sap and leaf and wood
In love of home and loyalty,
And forecast thought of civic good,—
His blessings on the neighborhood
Who, in the hollow of His hand
Holds all the growth of all the land,
A nation's growth from sea to sea
Stirs in his heart who plants a tree.

—COOLEY'S *Language Book.*

THE APPLE

The apple is the most common and yet the most varied and beautiful of fruits. A dish of them is as becoming to the center-table in winter as was the vase of flowers in the summer,—a bouquet of Spitzenburgs and Greenings and Northern Spies. A rose when it blooms, the apple is a rose when it ripens. It pleases every sense to which it can be addressed, the touch, the smell, the sight, the taste; and when it falls, in the still October days, it pleases the ear. It is a call to a banquet, it is a signal that the feast is ready. The bough would fain hold it, but it can now assert its independence; it can now live a life of its own.

Daily the stem relaxes its hold, till finally it lets go completely and down comes the painted sphere with a mellow thump to the earth, toward which it has been nodding so long. It bounds away to seek its bed, to hide under a leaf, or in a tuft of grass. It will now take time to meditate and ripen! What delicious thoughts it has there nestled with its fellows under the fence, turning acid into sugar, and sugar into vinegar.

How pleasing to the touch! I love to stroke its polished rondure with my hand, to carry it in my pocket on my tramp over the winter hills, or through the early spring woods. You are company, you red-cheeked spitz, or you salmon-fleshed greening! I toy with you; press your face to mine, toss you in the air, roll you on the ground, see you

shine out where you lie amid the moss and dry leaves and sticks. You are so alive! You glow like a ruddy flower! You look so animated I almost expect to see you move! I postpone the eating of you, you are so beautiful! How compact; how exquisitely tinted! Stained by the sun and varnished against the rains. An independent vegetable existence, alive and vascular as my own flesh; capable of being wounded, bleeding, wasting away, or almost repairing damages! * * * *

An apple orchard is sure to bear you several crops beside the apple. There is the crop of sweet and tender reminiscences, dating from childhood and spanning the seasons from May to October, and making the orchard a sort of outlying part of the household. You have played there as a child, mused there as a youth or lover, strolled there as a thoughtful sad-eyed man. Your father, perhaps, planted the trees, or reared them from the seed and you yourself have pruned and grafted them, and worked among them, till every separate tree has a peculiar history and meaning in your mind. Then there is the never-failing crop of birds,—robins, goldfinches, king-birds, cedar-birds, hair-birds, orioles, starlings,—all nesting and breeding in its branches and fitly described by Wilson Flagg as "Birds of the Garden and Orchard."

—*From Winter Sunshine.*—JOHN BURROUGHS.

By special permission and arrangement with Houghton, Mifflin & Co.

HONEY BEES

Purpose of the Lesson.—To emphasize interdependence by directing attention to the relation of flowers and bees.

To become better acquainted with the life and habits of one of the most intelligent of insects.

Material Useful for Illustrating the Lesson.—Bees, honeycomb, wax, and flowers containing pollen.

Preparatory Work.—Talk with pupils about flowers, their beauty and use. Let children tell about the home, appearance, and habits of their favorite flowers. What insects visit them? Why are the flowers and the bees such good friends? Request pupils to watch a bee for five or ten minutes each day for a week or so, and report observations daily. How many different flowers did it visit? Were the flowers all alike or did it

go from one flower to another? Children find nectar in flowers. How many have visited a hive? Tell pupils that the bees seem grateful for the apple blossoms, clover, linden, buckwheat, and many other trees and flowers, but they never seem to appreciate man's kindness in giving them a hive.

After interest has been awakened by out-door observation a few bees may be secured almost any sunny day, put in a glass jar, and covered with netting. A lump of moistened sugar or a little honey and some fresh flowers will satisfy their hunger while the children are getting better acquainted with them. Continue study out-of-doors.

Habits and Structure.—Direct attention to the bees in the window jar and bring out as many of the following facts by questioning, as possible:

The bee's body is divided into three parts,—head, thorax, and abdomen.

The long tongue is used in getting nectar from the flowers.

Wings.—Four transparent wings. The fore large wing and the hind small one are hooked together and spread out when flying, but when walking are folded so that the smaller wing slips under the larger one. Advantage of this arrangement?

Eyes.—Two large compound eyes on the side of the head and three single eyes on the top of the head.

Antennae.—By means of the antennae or feelers the bee hears, smells, discovers the nature of objects and communicates with other bees.

The bee has six legs attached to the thorax. The hind legs of the workers are provided with pollen baskets.

Examine a piece of honeycomb and see the advantage of the six-sided cells,—no waste.

Let children find answers to the following questions: How is wax made? The workers eat all the honey they can, hook themselves together in long lines that hang in festoons from

the top of the hive until tiny scales of wax appear between the rings of the abdomen of each bee. In about twenty-four hours the honey is changed to wax. It takes about twenty-five pounds of honey to make one pound of wax.

It is estimated that a colony of forty thousand workers can make about four thousand cells in twenty-four hours.

How far do they travel for nectar? As a rule, only a short distance, but bees have been known to fly many miles.

Prof. Hodges tells us that a swarm can make a thousand pounds of honey in a season.

What trees yield honey? Basswood, maple, willow, apple, etc.

What flowers? White clover, buckwheat, raspberry, corn, wheat, dandelion, etc. The red clover gives its honey to the bumble-bee and the Italian bee.

What time do bees begin their day's work? Before sunrise.

Let older pupils discover the importance of their work in carrying pollen from one flower to another of the same kind (cross-pollination).

Cover a cluster of buds with netting before the flowers open, —strawberry, apple, plum, cherry, etc. Compare strawberries on covered cluster with berries on exposed stems. In autumn compare apples and plums on covered and uncovered branches. The superior quality and quantity of the fruit on uncovered branches is due to cross-pollination.

The bee family, swarming, and the life story of bees are topics of great interest.

In case pupils have no opportunity to watch a swarm of bees at work, it may be advisable to conclude the study in the lower grades with the pollination of flowers.

Read to children part of "Birds and Bees" and "Locusts and Wild Honey" by John Burroughs. Read "King Solomon and the Bees" told in verse by J. G. Saxe.

KING SOLOMON AND THE BEES

Many, many years ago there lived a very wise king named Solomon. He knew all the flowers of the field and the trees of the forest; the secrets of birds, bees, ants and butterflies, where they lived and how they obtained their food. When people had disputes to settle they appealed to him, believing that he would tell them what was right.

The Queen of Sheba heard of Solomon's fame and resolved to visit him and make a test of his wisdom. She required the most skillful workmen in her kingdom to make a bouquet of artificial flowers, and so perfect were they that it was almost impossible for the keenest observer to distinguish them from the flowers that grew in the garden. The queen brought the artificial flowers and a bunch of natural flowers to the king and asked him to tell her which were the real flowers. Solomon was puzzled and realized that it was not easy to answer this question. He caught sight of a bee outside the window and requested a servant to open the window and admit this welcome visitor. The bee at once made its way to the heart of the real flowers. Then the king said: "The answer to your question is plain, O Queen; the strong and wise may learn from the smallest creature if he will but watch for its teaching."

The queen said: "I have traveled far to learn the secret of your wisdom, O King, and my journey is not in vain. I am convinced that you are truly wise."

—ADAPTED.

BEES

There is no creature, with which man has surrounded himself that seems so much like a product of civilization, so much like the result of development on special lines and in special fields, as the honey-bee. Indeed, a colony of bees, with their neatness and love of order, their division of labor, their public-spiritedness, their thrift, their complex economics, and their inordinate love of gain, seems as far removed from a condition of rude nature as does a walled city or a cathedral town. Our native bee, on the other hand, "the burly, dozing humble bee," affects one more like the rude, untutored savage. He has learned nothing from experience. He lives from hand to mouth. He luxuriates in time of plenty, and he starves in times of scarcity. He lives in a rude nest, or in a hole in the ground, and in small communities; he builds a few deep cells or racks in which he stores a little honey and

bee-bread for his young, but as a worker in wax he is of the most primitive and awkward. The Indian regarded the honey-bee as an ill-omen. She was the white man's fly. In fact she was the epitome of the white man himself. She has the white man's craftiness, his industry, his architectural skill, his neatness and love of system, his foresight, and, above all, his eager, miserly habits. The honey-bee's great ambition is to get rich, to lay up great stores, to possess the sweet of every flower that blooms. She is more than provident. Enough will not satisfy her; she must have all she can get by hook or crook. She comes from the oldest country, Asia, and thrives best in the most fertile and long settled lands.

—*From An Idyl of the Honey Bee.*—JOHN BURROUGHS.

By special permission and arrangement with Houghton, Mifflin & Co.

RABBITS

The domesticated rabbit is very common; it is a great favorite with children, and an excellent type-animal for the study of the "gnawers" or rodents.

By a little effort, one or two rabbits can be obtained and their life and habits observed in the school-room or school-yard.

The study will be of comparatively little value, without the living rabbits.

Aim.—To awaken a sympathetic interest in animal life.

To lead children to observe the habits and structure of the rabbit, and to discover the adaptation of structure to life and habits.

Material

One or two rabbits in a wire cage.

A box or large tray of sand in which the rabbits can dig. Pictures of rabbits.

Preparatory Work.—Find out how many of the pupils have pet rabbits. Let children tell some of the interesting things they have discovered while caring for their pets. What does the rabbit eat? Can he hear well? How does he drink?

What can you tell about his disposition? Do you think the rabbit is pretty? Why?

Observation of Habits

Playing.—Rabbits are very active and enjoy frolicking about when they have plenty of room. Children, watch them at play and describe their actions.

Compare with cat.

Washing.—Watch the rabbit brushing his fur with his foot and then sponging it with his tongue. Tell how he washes his face. How does he hold down his ears? How does the cat wash herself?

Eating.—Give the rabbit some cabbage, and notice how he bites it off. He moves his lower jaw up and down, sideways, and from front to back. Examine his chisel-shaped, sharp, front teeth.

Burrowing.—Let children tell how the rabbit digs with his fore feet, and pushes the earth back with his hind feet. Give the rabbit a chance to burrow in the box of sand. Tell the pupils about the hares, often called "wild rabbits," that burrow under the snow in winter.

Children read about Hiawatha's rabbits.

Of all beasts he learned their language;
Learned their names and all their secrets;
How the beavers built their lodges;
* * *
Why the rabbit was so timid;
Talked with them where'er he met them
Called them "Hiawatha's Brothers."

Positions

Notice the rabbit's position when resting, sleeping, and sitting.

When resting he draws his head close up to his body, turns his ears backward, partly closes his eyes, and draws his feet under him. Looks like a ball of white fur.

When sleeping he sometimes stretches his body out full

length, rests his head on his fore paws, and turns his ears back close to his body.

When sitting he doubles his hind legs under him, straightens out his fore legs, and raises his ears; or he rests his body on the hind legs, and uses his fore legs for hands.

Have you seen rabbits listening? Describe position.

Have you seen them huddle close together?

Picture rabbits in three or four different positions.

Movements.—Study the rabbit's movements in the cage. When he walks he generally brings his two hind feet together very quickly. Open the cage and let Bunny show how well he can hop. Hopping and jumping are his usual means of locomotion. When he is frightened he will show how well he can jump.

Can you describe the position of his feet when he springs forward a yard or more at a bound? Sprinkle sand on the floor and examine the rabbit's tracks.

Read and discuss Hamilton Gibson's "How Bunny Writes His Autograph" (Sharp Eyes).

Which legs are the longer? the stronger?

Does the rabbit make much noise when he moves from place to place? Why not?

Examine the feet and find out how they are adapted to prevent noise. Insist upon personal observation.

The long, spreading, flexible foot with pad near end is covered with brush-like hairs. Use of pad or cushion? Use of brush-like hairs?

The hind legs are longer and stronger than the fore legs. Used mainly for hopping or jumping. The fore legs are used mainly for grasping things.

Body as a Whole.—Measure length of body when the rabbit is stretched out.

Shape.—Cylindrical. Head somewhat oval in shape; about

one-third as long as the trunk; neck very short. Notice the position and attachment of legs of rabbit. Fine, soft, furry covering, variable in color. Use: To beautify and to protect from cold.

Ears.—The large, delicate, more or less transparent ears are situated on top of head. Note shape of base. Note freedom of movement.

Eyes.—Compare the eye of the rabbit with the eye of the cat.

Large "bulging" eye on side of head, usually pinkish, has three eyelids. The rabbit can turn his eyeball and see behind him with a slight movement of the head.

Whiskers.—Notice position with reference to mouth and ears.

Nose.—Observe size and openings, also movements when cabbage or other favorite vegetable is near.

Mouth.—Upper lip cleft up to the nose. Is this an advantage?

Teeth.—Examine the two long, sharp, incisor teeth in the front of each jaw. Teacher, tell pupils about the flat, grooved, grinding teeth, and the small teeth hidden by the incisors in the upper jaw.

How does the rabbit keep his incisor teeth sharp enough to eat bark, twigs, and vegetables? The teeth grow out from the jaw as fast as they wear away. How does the rabbit keep his teeth worn down? Do they ever grow out faster than they wear away? Yes, sometimes Bunny's teeth grow so long that he cannot eat. What will he do then? Recall what children learned about the squirrel's teeth last fall.

Compare teeth of rabbit with teeth of squirrel.

Disposition.—Are rabbits gentle or rough, when they play together? Why do you think so? Are they easily frightened? Are they timid? Trustful? Give reason for your answer.

When eating together, how do they act? Are the two rabbits we have been studying alike in disposition?

Food.—Rabbits like clover, oats, meal, carrots, cabbage, lettuce, turnips, parsnips, etc. They often kill young trees by gnawing the bark.

Enemies.—The rabbit has a great many enemies: hawks, owls, weasels, foxes, hedgehogs, cats, and man.

Read John Burroughs' "Life of Fear in Riverby."

Home Life.—The true home of the wild rabbit is not in the school-room.

Teacher, tell children about the free. happy life of the rabbit in the woods.

Compare home and life with the home and life of the squirrel and the cat.

Rabbits frequently burrow in the hillside, and many burrows often communicate, forming what is called a "warren" in which great numbers may live together.

Describe zigzag arrangement of burrows. Why? Enemies cannot enter without great effort.

Care of the Young.—Tell children about the mother making a special home for the young,—collecting leaves and pulling hair from her own body to make a nice bed for the little rabbits, and remaining in the burrow a couple of days at a time without food, carefully covering the opening to the burrow when she finds it necessary to go out in search of food.

Tell story of "Battle Bunny" by Bret Harte. Europe, Asia, and Africa, the original home of the wild rabbit.

Why is this little animal so well liked as a pet?

Let children recall desirable characteristics, its gentleness, its kindness, its cleanliness, the ease with which it can be cared for, etc.

Summary.—Adaptation of structure to habits. The ears: freedom of movement, size, form, etc. The eyes: how adapted

to needs. The mouth and teeth: how adapted for gnawing? By shape, size, and strength of teeth, free movement of lower jaw, cleft upper lip.

The legs and feet: how adapted for locomotion?

The two hind legs longer and stronger than the two fore legs, the cushions, brush-like hairs and strong nails on the feet enable the rabbit to move noiselessly, brush his fur, and dig or burrow in the earth.

THE WILD RABBITS

They live in burrows with winding ways,
And there they shelter on rainy days.
The mother rabbits make cosy nests,
With hairy linings from their breasts.
—SELECTED.

If the study of adaptation is not based on careful observation the work will be of little value.

How is the rabbit distinguished from the hare?

THE HARE AND THE TORTOISE

A Hare one day ridiculed the slow pace of the Tortoise, and boasted of his own speed in running.

The Tortoise said, "Let us try a race. I will run with you five miles, and our friend the Fox may act as judge."

"All right," said the Hare, and away they went together. The Tortoise jogged along with a slow and steady pace to the end of the journey.

The Hare first outran the Tortoise, then fell behind and began to nibble at the grass and to play hide and seek with other hares. Finally he became tired with play and lay down for a nap, saying, "If the Tortoise should get ahead of me I could catch up with her and pass her without the least trouble." The Hare woke up but the Tortoise was not in sight; and running as fast as he could he found her at her goal fast asleep, while the Fox stood waiting to tell the Hare he had lost the race. —FROM *Aesop's Fables.*

FISHES

Fishes are quite as interesting as their neighbors that live upon the land.

The following outline is only suggestive, but it is intended

to indicate some of the things that the children may learn about the fish.

Goldfish or minnows in glass jars.

Children observe movements and habits in living fish. How adapted to live in water? Examine the scales. Which way do they point? Why? Of what use are the scales to the fish? How does the fish breathe? Does it open its mouth? Has it eyelids? Where are the gills? How is the tail used? What does the fish eat? Has it teeth? Describe your favorite fish.

Count the fins. Where situated? structure? use of fins? Describe the gills.

Shape of Body.—A fish is shaped as a wedge at both ends. This is the typical form.

Is this the shape that can be moved through the water with the least amount of force?

Do you suppose boats are patterned after fishes?

The Covering of Fishes.—Direct attention to the arrangement of the scales. The front edges are embedded and held firmly in folds of the skin. The scales form a protecting skeleton and admit of great freedom of motion. Are all fishes provided with scales?

Note the slimy covering.

The Fins and Tail.—Children, watch the fish at rest—the fish swimming.

Teacher, make a blackboard drawing and show fins, gills, etc.

The fins vary in number and position, but most fishes have five kinds.

The pectoral fins are behind the head, one on each side of the body.

The ventral fins are below and still further back. In some fishes these are placed as far back as the tail, in others as far forward as the throat.

THE SHEPHERDESS—*By Henri Lerolle.*

The dorsal fin is on the back. Some fishes have two dorsal fins. The anal fin is on the under side near the tail.

Last is the tail or caudal fin.

The fins are folds of the skin strengthened by bony spikes. With the exception of the caudal fin, the chief use of the fins is for balancing.

The tail-fin is the important propeller,—the oar.

Besides the tail-fin the other two vertical fins—the anal and dorsal—may aid the fish in swimming.

How does the Fish Breathe?—Direct attention to the gill cover on the side of the head. The gills are so arranged as to bring the cold red blood of the fish in contact with the air which is in the water. The water flows in at the mouth, over the gills and out under the gill cover. The gills serve the purpose of lungs. Does the fish hear?

It is claimed that gold fishes have been trained to respond to the ringing of a bell at their meal time. Some fishes are provided with teeth. Is the minnow? the gold fish?

Compare the minnow with the cat-fish. Find out about the habits of the flying-fish, cuttle-fish, stickleback, and other interesting fishes.

Tell the children of the salmon fisheries, the fishing off the banks of Newfoundland, and the migration of fishes.

Describe the world renowned aquarium in Naples.

The teacher must, from general suggestions, make detailed outlines to suit her school if she hopes to succeed with the fish, or other nature lessons.

THE SHEEP AND THE COW

As the facts concerning this lesson are well known, only a few topics are suggested which the teacher should expand.

The sheep and the cow eat the same kind of food—grasses,

grains, etc.—are cud-chewers, have no front teeth in upper jaws, have four stomachs, have divided hoofs.

Character

The sheep is gentle, patient, timid, social.

The cow is social, shows strong attachment for her young.

The cud-chewing animals furnish a very important part of our food and clothing.

Let children make a list of the things that are given by the sheep. By the cow.

Which is the most useful animal?

Lead the children to get as much of the information as possible from their own observation.

Procure good pictures of country life, "The Return of the Flock," "The Shepherdess," "The Sheep Pasture."

SLEEP, BABY, SLEEP!

Sleep, baby, sleep!
Thy father watches his sheep;
Thy mother is shaking the dreamland tree,
And down comes a little dream on thee.
Sleep, baby, sleep!

Sleep, baby, sleep!
The large stars are the sheep;
The little stars are the lambs, I guess;
And the gentle moon is the shepherdess.
Sleep, baby, sleep!

Sleep, baby, sleep!
Our Saviour loves His sheep;
He is the Lamb of God on high,
Who for our sakes came down to die.
Sleep, baby, sleep!

—E. PRENTISS (*from the German.*)

CHAPTER V

LANGUAGE—THOROUGH LITERATURE

STORIES AND POEMS

Literature of power and distinction will prove invaluable as a means of strengthening virtue, attacking vice and enriching language. The models of expression placed before the young in prose or verse should contain pure and ennobling thoughts, the best that has been enshrined in literature. Froebel declares that early impressions are the root fibers for the understanding that is developed later and Miss Arnold writes: "We teach the child to read without implanting in his soul such love for the good in literature that he will choose the good and no other, and we have opened for him doors into evil paths as well as good, without power to withstand the temptations of the one and to steadily pursue the other. We give him power to express his thoughts—what thoughts?"

Beautiful thought and beautiful expression should be absorbed in childhood even though the meaning may not be fully comprehended. Millions of souls bear willing testimony to the truth of Hinsdale's statement, "The great passages of the Bible may be read and committed to memory years before they can be logically analyzed, a glimpse of the Divine Majesty, a view of the future glory, a touch of the celestial, will come into the heart and life of a little child from a lesson that he will never fully comprehend."

Whittier says: "I well remember how, at an early age, the solemn roll of Gray's Elegy moved and fascinated me with a sense of majesty and power, felt, rather than understood. The poem spoke to me like the wind in the pines or the waves on the beach, awakening faint echoes and responses and vaguely prophesying of wonders yet to be revealed."

The value of early impressions is suggested in the following lines:

A CRADLE SONG

Sing it, Mother! sing it low
Deem it not an idle lay,
In the heart 'twill ebb and flow
All the lifelong way.

Sing it, Mother! softly sing,
While he slumbers on thy knee;
All that after years may bring
Shall flow back to thee.

Sing it, Mother! Love is strong!
When the tears of manhood fall,
Echoes of the cradle song
Shall its peace recall.

Sing it, Mother! when his ear
Catcheth first the Voice Divine,
Dying, he may smile to hear
What he deemeth thine.

—FATHER TABB (*Kindergarten Magazine.*)

By permission Small, Maynard & Co.

Stories of King Arthur and his valiant knights furnish high ideals of service, valor, and purity of life, and may be made the rallying points in elevating ideals and influencing character in the lower grades. King Arthur's ideal of knighthood is known by the lines: "Wearing the white flower of a blameless life" and "A glorious company, the flower of men."

Teacher, review briefly the story of feudalism. Show pict-

ures of noted castles and discuss the general plan of the feudal castle. Read appropriate extracts from Tennyson's "Idyls of the King" and Lowell's "Vision of Sir Launfal." Tell the "Story of Gilbert" by Jane Andrews. Discuss ideal family relationship; boys proud to serve mothers as shown by Roland's devotion to his mother, the Lady Bertha. Position of women. Training for knighthood; page, squire, knight. Religious training. Training in courtesy. Show pictures of beautiful cathedrals and discuss occupations belonging to Gilbert's time: mosaic work, illumination of manuscripts, painting, sculpture, etc.

In the "Idyls of the King," Tennyson combines the ideal of Christian Chivalry with the perfection of modern expression, says a noted critic.

FOR READING AND DISCUSSION:

And Arthur sat
"Crowned, on the dias and his warriors cried
'Be thou the king, and we will work thy will
Who love thee.' Then the king in low deep tones,
And simple words of great authority,
Bound them by so strict vows to his own self
That, when they rose, knighted from kneeling, some
Were pale as at the passing of a ghost,
Some flushed, and others dazed, as one who wakes
Half-blinded at the coming of a light.
But when he spoke and cheered his Table Round,
With large divine and comfortable words
Beyond my tongue to tell thee—I beheld
A momentary likeness of the King:"
* * * —*From The Coming of Arthur.*

"I was first of all the kings who drew
The knighthood-errant of this realm and all
The realms together under me, their Head,
In that fair Order of my Table Round,
A glorious company, the flower of men,
To serve as model for the mighty world,

And be the fair beginning of a time.
I made them lay their hands in mine and swear
To reverence their conscience as their King,
To break the heathen and uphold the Christ,
To ride abroad redressing human wrongs,
To speak no slander, no, nor listen to it,
To honor his own word as if his God's
To lead sweet lives in purest chastity."

—*From Guinevere.*

"Had you known our mighty hall,
Which Merlin built for Arthur long ago,
Tower after tower, spire beyond spire,
By grove, and garden-lawn, and rushing brook,
Climbs to the mighty hall that Merlin built.
And four great zones of sculpture, set betwixt
With many a mystic symbol, gird the hall:
* * *
And over all one statue in the mould
Of Arthur, made by Merlin, with a crown,
And peak'd wings pointed to the Northern Star.
And eastward fronts the statue, and the crown
And both the wings are made of gold, and flame
At sunrise till the people in far fields,
Wasted so often by the heathen hordes,
Behold it, crying, 'We have still a King.'
* * * *
From noiseful arms, and acts of prowess done
In tournament or tilt, Sir Percivale,
Whom Arthur and his knighthood call'd The Pure,
Had pass'd into the silent life of prayer,
Praise, fast, and alms; and leaving for the cowl
The helmet in an abbey far away
From Camelot, there, and not long after died.
* * * *
Tell me what drove thee from the Table Round
* * Was it earthly passion crost?
"Nay," said the knight; "for no such passion mine.
But the sweet vision of the Holy Grail
Drove me from all vain glories, rivalries,

SIR GALAHAD—*By Watt*

And earthly heats that spring and sparkle out
Among us in the jousts." * * * The Holy Grail!
"The cup, the cup itself from which our Lord
Drank at the last sad supper with his own.
This, from the blessed land of Aromat—
After the day of darkness, when the dead
Went wandering o'er Moriah—the good saint
Arimathaean Joseph; journeying brought
To Glastonbury, where the winter thorn
Blossoms at Christmas, mindful of our Lord.
And there awhile it bode; and if a man
Could touch or see it, he was heal'd at once,
By faith, of all his ills. But then the times
Grew to such evil that the holy cup
Was caught away to Heaven and disappear'd."

—*From The Holy Grail.*

* * * The Holy Grail
"A legend handed down through five or six,
And each of these a hundred winters old,
From our Lord's time. And when King Arthur made
His Table Round, and all men's hearts became
Clean for a season, surely he had thought
That now the Holy Grail would come again.
* * * * * * Come now, let us meet
The morrow morn once more in one full field,
Of gracious pastime, that once more the King,
Before ye leave him for this quest, may count
The yet unbroken strength of all his knights,
Rejoicing in that Order which he made.'
* * * *
And one there was among us, ever moved
Among us in white armor, Galahad.
'God make thee good as thou art beautiful,'
Said Arthur, when he dubb'd him knight:
And none,
In so young youth, was ever made a knight
Till Galahad."

From The Holy Grail.

* * * * *

My good blade carves the casques of men,
My tough lance thrusteth sure,
My strength is as the strength of ten,
Because my heart is pure.
I yearn to breathe the airs of heaven
That often meet me here.
I muse on joy that will not cease,
Pure spaces clothed in living beams,
Pure lilies of eternal peace,
Whose odors haunt my dreams;
* * *
The clouds are broken in the sky,
And thro' the mountain-walls
A rolling organ-harmony
Swells up, and shakes and falls.
Then move the trees, the copses nod,
Wings flutter, voices hover clear:
"O just and faithful knight of God!
Ride on! the prize is near."
So pass I hostel, hall and grange;
By bridge and ford, by park and pale
All-armed I ride what 'er betide,
Until I find the *Holy Grail.*"

—*From Sir Galahad.*

"Lo, now," said Arthur, "have ye seen a cloud?
What go ye into the wilderness to see?"
Then Galahad on the sudden, and in a voice
'Shrilling along the hall to Arthur, call'd,
"But I, Sir Arthur, saw the Holy Grail,
I saw the Holy Grail, and heard a cry—
'O Galahad, and O Galahad, follow me.'"
"Ah, Galahad, Galahad," said the King, "for such
As thou art is the vision."
* * *
In silver armour suddenly Galahad shone
Before us, and against the chapel door
Laid lance, and enter'd, and we knelt in prayer,
* * * *
I, Galahad, saw the Grail,
The Holy Grail. And in the strength of this I rode,

Shattering all evil customs everywhere,
And past thro' Pagan realms, and made them mine,
And clash'd with Pagan hordes, and bore them down,
And broke thro' all, and in the strength of this
Come victor. But my time is hard at hand,
And hence I go; and one will crown me king
Far in the spiritual city."
His silver arms glanced and gloom'd: so quick and thick
The lightnings here and there, to left and right
Struck, till the dry old trunks about us, dead,
Yea, rotten with a hundred years of death,
Sprang into fire: and at the base we found
On either hand, as far as eye could see,
A great black swamp. * * *

Not to be crost, save that some ancient king
Had built a way, where, link'd with many a bridge,
A thousand piers ran into the great sea.
And Galahad fled along them bridge by bridge,
And every bridge as quickly as he crost
Sprang into fire and vanished tho' I yearned
To follow; and thrice above him all the heavens
Open'd and blaz'd with thunder such as seem'd
Shoutings of all the sons of God; and first
At once I saw him far on the great sea,

* * * *

And with exceeding swiftness ran the boat,
If boat it were—I saw not whence it came.
And when the heavens open'd and blazed again
Roaring, I saw him like a silver star—
And had he set the sail, or had the boat
Become a living creature clad with wings?

* * * *

Then in a moment when they blazed again
Opening, I saw the least of little stars
Down on the waste, and straight beyond the star
I saw the spiritual city and all her spires
And gateways in a glory like one pearl—
No larger, tho' the goal of all the saints—

Strike from the sea; and from the star there shot
A rose-red sparkle to the city, and there
Dwelt, and I knew it was the Holy Grail.

—*From The Holy Grail.*—ALFRED LORD TENNYSON.

King Arthur lived more than a thousand years ago in a grand castle in Cornwall. Twelve of the bravest and noblest of all the knights were chosen to sit with the king at a round table, and they were called "The Knights of the Round Table."

THE VOW OF KNIGHTHOOD

"I will be faithful to God and loyal to the King. I will reverence all women. I will ever protect the pure and helpless. I will never engage in unholy wars. I will never seek to exalt myself to the injury of others. I will speak the truth and deal justly with all men."

The legends of King Arthur and his knights were floating around Wales, England and other countries for centuries. At the close of the fifteenth century, Sir Thomas Mallory put into English all the stories relating to this great and good king and his valiant knights and ladies. Tennyson labored for more than half a century over the productions of the Idyls of the King—"The Coming of Arthur," "Gareth and Lynette," "Geraint and Enid," "Merlin and Vivien," "Lancelot and Elaine," "The Holy Grail," "Pelleas and Ettarre," "The Last Tournament," "Guinevere," and "The Passing of Arthur."

HE SAYS:

"Accept this old imperfect tale
New-old and shadowing sense with soul."

In the extract from "The Coming of Arthur" what do we learn about knighthood? What do we learn from "Guinevere"? Describe the hall that Merlin built for Arthur. Tell the story of King Arthur. Who was Percivale? Galahad? Study the picture of Sir Galahad.

Why does the name Galahad stand for valor and purity? What is meant by Holy Grail? What was Arthur's question?

Galahad's answer? What pictures do you see in the last extract from "The Holy Grail"? What is a legend? When did King Arthur live? Where? What was the vow or oath of knighthood? Memorize the lines from Sir Galahad. How may any boy become a knight? Teacher, read and re-read Tennyson's poems to the children until his matchless music reaches their hearts.

CHILDREN MEMORIZE:

BREAK, BREAK, BREAK.

Break, break, break,
On thy cold gray stones, O sea!
And I would that my tongue could utter
The thoughts that arise in me.

O well for the fisherman's boy,
That he shouts with his sister at play!
O well for the sailor lad,
That he sings in his boat on the bay!

And the stately ships go on
To their haven under the hill;
But O for the touch of a vanished hand,
And the sound of a voice that is still!

Break, break, break,
At the foot of thy crags, O Sea!
But the tender grace of a day that is dead
Will never come back to me.

—ALFRED LORD TENNYSON.

NOTE.—Dr. Francis Egan writes: If any man should ask me for illustrations of the most evanescent quality in poetry,—that quality which is utterly incapable of being defined, I should point to the "Break, Break, Break" of Tennyson and "The Rainy Day" of Longfellow.

When Tennyson left his country home at the age of twenty-three to go to London, he wrote:

"A FAREWELL"

Flow down cold rivulet to the sea;
Thy tribute wave deliver:
No more by thee my steps shall be
Forever and forever.

Flow, softly flow, by lawn and lea,
A rivulet, then a river;
Nowhere by thee my steps shall be
Forever and forever.

But here will sigh thine alder tree
And here thine aspen shiver;
And here by thee will hum the bee
Forever and forever.

A thousand suns will stream on thee,
A thousand moons will quiver;
But not by thee my steps shall be
Forever and forever.

CHILDREN MEMORIZE:

BUGLE SONG

The splendor falls on castle walls
And snowy summits old in story,
The long light shakes across the lakes,
And the wild cataract leaps in glory.
Blow, bugle, blow! set the wild echoes flying;
Blow, bugle; answer, echoes—dying, dying,
dying!

O hark, O hear! how thin and clear,
And thinner, clearer, farther going!
O sweet and far, from cliff and scar,
The horns of Elfland faintly blowing!
Blow! let us hear the purple glens replying;
Blow, bugle; answer, echoes—dying, dying,
dying!

O love! they die in yon rich sky:
They faint on hill, or field or river;
OUR echoes roll from soul to soul,
And GROW forever and forever.
Blow, bugle, blow! set the wild echoes flying;
And answer, echoes, answer—dying, dying,
dying!

—TENNYSON.

The Bugle Song is regarded by some critics as the finest lyric that has been written since the days of Shakespeare.

NOTE.—It is based upon the contrast between the echoes of a bugle on a mountain lake, which grow fainter and fainter in proportion to the receding distance, and the influence of soul upon soul through growing distances of time. The stress of meaning is in the words our and grow. Our echoes roll from soul to soul, from grandparent to parent and grandchild. This poem represents unity through the family in its relation to the future.

—Dr. O'Hagan.

FOR MEMORIZING AFTER DISCUSSION:

EXTRACT FROM THE VISION OF SIR LAUNFAL

My golden spurs now bring to me,
And bring to me my richest mail,
For to-morrow I go over land and sea
In search of the Holy Grail;
Shall never a bed for me be spread,
Nor shall a pillow be under my head,
Till I begin my vow to keep;
Here on the rushes will I sleep,
And perchance there may come a vision true
Ere day create the world anew.

* * * *

The drawbridge dropped with a surly clang,
And through the dark arch a charger sprang,

Bearing Sir Launfal, the maiden knight
In the gilded mail, that flamed so bright,
It seemed the dark castle had gathered all
Those shafts the fierce sun had shot over its wall,
In his siege of three hundred summers long,
And, binding them all in one blazing sheaf,

Had cast them forth: so, young and strong,
And lightsome as a locust-leaf,
Sir Launfal flashed forth in his maiden mail
To seek in all climes for the Holy Grail.
* * *

—LOWELL.

By permission of Houghton, Mifflin & Co.

Teacher, read to the children other extracts from this beautiful vision.

A love of good literature is one of the best and most valuable possessions a child can receive, and he should be taught to appreciate and to love a few genuine masterpieces before he leaves the intermediate grades.

Willman summarizes the essentials of a good story: "There are then five requirements to be made of a real child's story: Let it be truly child-like, that is, both simple and full of fancy; let it form morals in the sense that it introduces persons and matters which, while simple and lively, call out a moral judgment of approval or disapproval; let it be instructive and lead to thoughtful discussions of society and nature; let it be of permanent value, inviting perpetually to a perusal; let it be a connected whole, so as to work a deeper influence and become the source of a many-sided interest."

Stories to take a strong, forceful hold upon the child's mind must be told, not read. The oral method was employed to communicate to the people the early literature of all countries; the minstrels sang their ballads and the poets and historians recited their productions in the open-air theaters and in the halls of the barons. The oral treatment is well adapted for gestures, blackboard sketching, the impersonation of characters—all modes of expression. Story telling is an art and success in this art can only be acquired by patience and by practice. The educative influence of stories and poems containing messages of truth, beauty and strength can scarcely be estimated.

"We live by Admiration, Hope and Love,
And even as these are well and wisely fixed,
In dignity of being we ascend."

HOW LITTLE CEDRIC BECAME A KNIGHT

A long time ago there lived a little boy whose name was Cedric. At the foot of a high hill, on top of which stood a grand old castle, was the stone hut in which he lived. The little boy had many a time watched the strong, iron gate rise slowly from the ground, as out of the courtyard of the castle would ride Sir Rollin DuBois and his faithful soldiers. There were sometimes two, or three visiting knights and their followers and they were a gay sight as the sun shone on their glittering armor of steel and glanced from their bright helmets. They looked so strong and resolute as they sat, calm and erect, in their saddles. A glance into their fine faces would have assured you that they were noble and brave and could be trusted by everybody, from the King to the poorest peasant in the land. Their very horses seemed proud to carry them as they galloped along. Little Cedric thought there never was anything more beautiful than these knights as they came down the hill on some quest of adventure, or errand of mercy.

One day Cedric had been playing with his pet kitten. After a good romp with her, he had thrown himself down on the soft green grass to rest, and the queer little kitten had gone out into the middle of the dusty road and curled herself up for a nice nap. Suddenly Cedric looked up, and saw five knights with all their squires and pages galloping down the road! In a moment more his eye fell upon the kitten lying fast asleep in the middle of the highway. Fearing that the horsemen would not see her, he sprang to his feet, ran quickly forward and gathered the soft little thing up in his arms, just in time to save it from the horses' feet.

As the riders passed, one of the tall knights slackened his horse and smiling down upon Cedric said, "My little fellow, you are almost brave enough to be a knight some day."

Cedric stood looking after the horsemen until they seemed a mere speck in the distance and then disappeared all together.

At last he turned to go into the house, and as he went, he said softly to himself, "To be a knight some day!" "To be a knight some day!" He ate his simple supper of bread and milk in silence.

That night he looked up at the stars and said in a soft, low tone,

"Beautiful stars, do you know what a wonderful thing Sir Rollin said to me to-day? He told me that perhaps some day I might be a knight!" He could hardly sleep, he was so happy. The great knight had spoken to him, had praised his courage, and, best of all, had said that perhaps, some day, he, Cedric, might be a great knight himself! "Could such a thing possibly come to pass?" He asked himself this question over and over again, until at last he fell asleep and dreamed that he was a large, strong man, and wore a shining armor of steel and rode a splendid black horse, and carried a great sword and that all the people of the country round about honored and loved him because he was one of the bravest knights in the whole land.

Just as he was dreaming that he was about to rescue a beautiful princess from an ugly giant who had shut her up in a prison, he heard his mother calling him. He opened his eyes and saw that the sky was all pink and gold with the clouds of the sunrise, and that he was only little Cedric in his attic chamber. He dressed himself quickly and climbed down the wooden ladder to the room below.

He was soon busy and happy, helping his mother feed the doves and water the cow and fetch hay for the two horses. After his father had eaten his breakfast, and had gone to his work in the field, the little would-be knight and his mother washed the dishes and tidied the two small rooms. Cedric was very fond of thus helping her with the work, and she often said, "My little boy is both son and daughter to me." By and by she sat down to her sewing. Then Cedric could keep his secret no longer. Going up to her, he put his arm around her neck and whispered to her the story of the knight, how he had stopped and spoken, and what he had said. "Do you think I could ever grow up to be a knight, mother?" asked he. His mother smiled, and then looked sober as she brushed his brown hair back from his forehead and said, "Knights have many, many hard things to do, my son, and oftentimes their lives are in danger." "Yes, I know," answered Cedric eagerly, "but think, mother, how brave they are, and how good! Do they not protect our country?" "Yes," said his mother, "I know all that, I could not sleep at night when our enemies are near at hand if I did not know that Sir Rollin Du Bois and his brave soldiers were on the hill close by. But you are a very little boy, Cedric. Run out to your play now."

Many times during the next few weeks little Cedric thought of the grand knights and how one of them had smiled at him and had spoken as if he, Cedric, might some day be a great, strong knight and ride a beautiful horse, and do brave deeds.

Weeks passed by and the spring had changed into summer. One evening, just as the setting sun was turning all the white clouds into gold and crimson, Cedric stood in the low doorway wondering if where the angels lived could be more beautiful than was the sky over his dear mountain home. He suddenly heard the tramp of horses' feet, and looking down across the plain, he saw a gay party of horsemen. Their armor flashed and shone in the light of the setting sun and their long white plumes waved in the gentle evening breeze. His face lighted up with a glad smile, for he knew that it was Sir Rollin Du Bois and his soldiers.

Just as they were passing the door in which Cedric stood, one of them stopped his horse and leaning forward said, "My little man, will you give me a drink of water?" Cedric ran quickly and filled a cup with fresh, cool water from the spring near by, and brought it to the knight. "Thank you," said the nobleman, as he handed the cup back to Cedric. "I am very glad to be able to serve you," said Cedric quietly. The knight smiled, gathered up the reins of his horse, and said, "You are as courteous as a knight my boy."

That evening Cedric told his mother of this second speech, and then he asked as a wistful look came over his face. "Ah, mother dear, do you think I can ever become a knight?"

Weeks passed into months and the soft, gray snow clouds had covered the green hills with the white mantle of winter. Whenever Cedric felt like being rude, or cross, or selfish, he thought of the bright smile on the great knight's face that summer evening, when he had asked for the cup of cold water, and he felt sure the smile would change into a frown if the knight should see him do a discourteous or a selfish act.

A year or two had passed when one day something happened which Cedric never forgot. His father came in from his work and said, "Sir Rollin Du Bois wants a young lad to come to the castle to take the place of his page who has lately been promoted. Do you think, wife, that our Cedric is strong enough for such an office?" Cedric's heart almost stopped beating while he listened for his mother's answer. She thought for a few moments and then said slowly as if weighing each word, "Yes, I think he would try very hard to do his duty, and I should like to have him learn more of knighthood. Perhaps some day he too may be a knight, who knows?" she added, as she turned smilingly to the radiant face of her boy.

That very afternoon she made a bundle of his few clothes, and his father took him by the hand and walked with him up the steep hill to

the great castle gate. Cedric had never before been so near the castle, and when his father lifted the heavy iron knocker and brought it down with two or three loud knocks, it seemed to Cedric that his heart was knocking almost as loudly. Not that he was afraid, but he was stirred by the thought of going into the presence of the great and noble Sir Rollin whom all the people loved and revered.

The huge iron gate slowly lifted. The drawbridge was already thrown across the ditch of water which surrounded the castle and in a few moments Cedric and his father had passed under the stone archway and were standing within the courtyard. A man took them into a large room whose walls and floors were of stone, and bade them sit down on a wooden bench which stood near the door, saying at the same time, "I will tell Sir Rollin that you are here."

They had been waiting some time when a door at the other end of the room opened and a large, well built man, who looked so tall and straight that he reminded Cedric of a mountain pine, came forward. He was not dressed in armor, but Cedric knew at once that it was Sir Rollin Du Bois. The knight talked a few moments with Cedric's father and then turning to Cedric he said "And you think you would like to become a knight, my boy? Are you sure that you will not mind hard work and will remember always to be true and pure, brave and unselfish?" Cedric's smile was so bright that no answer was needed. The knight turned again to his father and said, "Do you realize that it will take some ten years or more of discipline and hard work on the part of your boy, before he can hope to be promoted to a position of responsibility?" "Yes," said the father quietly, "but I think he is willing to try it."

After a little talk it was decided that the boy should begin his training then and there. So his father bade him good-bye and left. Cedric was taken by an older boy up some stone stairs to a small room whose ceiling, walls and floor were of stone. In the corner of the room lay a pile of straw, over which had been thrown a sheepskin. At one side of the room was a small table. No other furniture was in the apartment save a cedar chest which was doubtless intended to serve for both chair and wardrobe. There was a narrow pointed window in one side of the room through which the sunlight came. Cedric went up to the window and looked out, but it was so high that he could see only the blue sky and a soft white cloud. "Ah," thought Cedric to himself, "I can at least see the stars at night and the sunlight each

morning. Will they not remind me always of the good God who watches over me?"

Cedric soon found that he had not only to eat coarse food and sleep upon a hard bed, but that he had to practice standing very straight, running very swiftly. He must learn to manage a horse, to jump on and off while the horse was in full gallop. He must learn to handle a spear, a lance and a sword with unerring accuracy. He must be prompt and ready to obey a call from Sir Rollin, and not only learn to do errands faithfully and quickly, but to wait patiently and quietly oftentimes when he could not understand why he waited.

Year after year passed by and little Cedric had not only grown strong and tall, but he had grown even more in thoughtfulness and courtesy toward all about him.

One day Sir Rollin sent for him. "Cedric," said he, "I wish you to take a message to the King. It is quite an important one and it must reach him before to-morrow night. Get ready as quickly as you can. Take my gray horse, as he is the swiftest one in the stables, and remember that I have trusted you much by sending you upon this errand."

"Cedric's heart beat with joy, as he thought, "At last I have proved faithful enough to be sent with a messaage to our great King." He was ready in less than half an hour, and jumping on the splendid gray charger he went galloping down the highway. On and on he rode.

At last he entered a thick forest of pine trees. The road grew very dark and lonesome. "What if I should meet some wild beast," thought Cedric, but he added, half aloud, "If I am ever to be a knight, I must learn to be brave and face every danger." It was not long before he was quite sure that he heard a deep, low growl. His heart beat fast, but he rode steadily forward and soon the growl was repeated, this time nearer and more distinct, and Cedric saw in the dim light, a great wild boar coming towards him. The creature's eyes were shining like fire, and his white tusks overhung his lower jaw in a fierce and forbidding fashion. Cedric knew that this must be the beast which had destroyed so many of the cattle of the neighboring peasants, but who was so strong and savage that no one had dared to go near him. He spurred his horse forward as he thought, "If I kill this wild boar I will already begin to be of service to the people of my country." So he lifted the spear which he carried at his side, from its leathern socket, and raising it high in the air, he hurled it swiftly at the beast who was ready to spring upon him. In a moment more the

wild boar rolled over upon the ground, dead. Cedric reached down and drew his spear from its side, and as he rode on again he thought, "Wolves and wild boars must not stop the way of a messenger of the King. I must fear nothing if I am to be a knight."

After a time his road lay out of the forest into the sunlight. As he approached a small village he heard a great noise as of much shouting and soon he saw a group of boys who were evidently hooting and laughing at something in their midst. He rode up to where they were and felt himself growing indignant as he saw an old, deformed man standing in their midst, at whom they were jeering. In a moment he sprang from his horse and pressing through the crowd of boys he stood beside the old man. On his face was a flush of indignant anger. "How dare you," he exclaimed, "laugh at or insult an old man like this?" The boys drew back, frightened. Although he was really no taller than they, he seemed to tower above them. "My!" exclaimed one of them. "doesn't he look like a knight as he stands there?" "I shouldn't wonder if he were one," said another.

Cedric turned to the old man who was trembling in every limb. "Where are you going?" asked he kindly. "Only to the next village," said the old man, "but these boys stopped me on my way. I cannot help my deformity nor my old age. I wish I could." The tears stood in his eyes as he spoke. "Come," said Cedric gently, "let me help you upon my horse. I, too, am going to the next village."

When they reached the next village Cedric helped the old man from the horse at his own door. He tightened the rein of his beautiful horse and soon left the village far in the distance. Cedric was very hungry, but a dry biscuit had to serve for his supper that night.

Late in the evening he reached the house at which he was to rest his horse and he himself slept for a few hours. By dawn the next day he was up and off on his journey.

The day grew very warm, but Cedric knew that he must not stop for his own comfort; his errand was an important one and he must reach the King's palace before night.

At last the beautiful palace came in sight and in a few moments Cedric had ridden into the courtyard. He gave his letter to a servant to carry it to one of the squires who gave it to a courtier who presented it to the King; for you must remember in those days a King was a very great person, and only those men who had risen high in rank could approach him.

Among other things the note contained this message. It told the

King that the bearer was a young lad who had been in training for knighthood and that Sir Rollin had found him always brave and trustworthy, true and noble, kind and courteous and that he, Sir Rollin, thought if the King wanted him in his army, he would find him worthy of the place.

The King sent for Cedric to come to him personally. Our little boy had grown into a tall man, you know, and his frank, pure face was good to look upon. The King told him that he wished to put him in office in his army; and thus Cedric went to live in the King's household and here he learned many things which he could not have learned at the castle of Sir Rollin DuBois.

Several years passed by, and Cedric had been intrusted with many enterprises, both difficult and dangerous. At last, one day the King informed him that he was worthy of the honor of knighthood.

In time he had a beautiful castle of his own, and splendid armor, the most beautiful black horse that you ever saw. The handsome horse used to prance and toss his head proudly in the air as if he knew what a noble young knight he was carrying, and as Cedric rode abroad over the country, many a time the peasants standing in their cottage doors, would say to each other, "There goes the brave Sir Cedric of Altholstane. God bless him! May he live long to help protect our country." And all the people loved him.

—Abridged. Told by Elizabeth Harrison in Story-Land. By Permission of the Author.

ABOU BEN ADHEM

Abou Ben Adhem (may his tribe increase)!
Awoke one night from a sweet dream of peace,
And saw, within the moonlight in his room,
Making it rich and like a lily in bloom,
An angel writing in a book of gold;
Exceeding peace had made Ben Adhem bold,
And to the presence in the room he said,
"What writest thou?" The vision raised its head,
And, with a look made of all sweet accord,
Answered, "The names of those who love the Lord,"
"And is mine one?" said Abou. "Nay, not so,"
Replied the angel. Abou spoke more low,
But cheerly still; and said "I pray thee, then,
"Write me as one who loves his fellow-men."

The angel wrote and vanished. The next night
It came again, with a great awakening light,
And showed the names whom love of God had blest;
And lo! Ben Adhems name led all the rest.

—LEIGH HUNT.

STUDY OF POEM:

THE BUILDERS

All are architects of Fate,
Working in these walls of Time;
Some with massive deeds and great,
Some with ornaments of rhyme.

Nothing useless is, or low;
Each thing in its place is best;
And what seems but idle show
Strengthens and supports the rest.

For the structure that we raise,
Time is with materials filled;
Our to-days and yesterdays
Are the blocks with which we build.

Truly shape and fasten these;
Leave no yawning gaps between,
Think not, because no man sees,
Such things will remain unseen.

In the elder days of art,
Builders wrought with greatest care
Each minute and unseen part;
For the gods see everywhere.

Let us do our work as well
Both the unseen and the seen;
Make the house where God may dwell
Beautiful, entire, and clean.

Else our lives are incomplete,
Standing in these walls of Time,
Broken stairways, where the feet
Stumble as they seek to climb.

CALIGULA'S PALACE AND BRIDGE — *By Turner*

Build to-day, then, strong and sure,
With a firm and ample base;
And ascending and secure
Shall to-morrow find its place.

Thus alone can we attain
To those turrets, where the eye
Sees the world as one vast plain,
And one boundless reach of sky.

—LONGFELLOW.

By permission of Houghton, Mifflin & Co., Publishers.

Aim.—To influence children to perform their daily tasks faithfully.

Preparation.—Informal talk on different occupations. Direct attention to a building in process of erection. Discuss desirability of good material well fitted together in foundation —in every part. Show pictures of great buildings.—Pantheon. When built? Condition at present time? (Built twenty-six B. C., and used as a church today.)

Milan Cathedral, called the eighth wonder of the world. The carvings as delicate in the darkest cranny as upon the most exposed surface. Thousands of statues on the roof wrought with the greatest care which are not seen without climbing to the top. Nearly two thousand varieties of flowers carved in marble. Building erected for the eye of God.

Presentation.—Read "The Builders." What comparison is suggested? What is the meaning of architects? massive? turrets? yawning? etc. Where are people working? What material are they using? How did they build in the elder days of art? Why do you think so? What is Longfellow's advice? How can each one prepare to meet to-morrow's duties and responsibilities? Who sees our thoughts as well as our deeds? What is the message contained in this poem? Children, memorize. Teacher, refer to message frequently when work is carefully prepared by pupils, "We are building with a firm and ample base." Why?

STUDY OF POEM:

THE LADDER OF ST. AUGUSTINE

Saint Augustine! well hast thou said,
  That of our vices we can frame
A ladder, if we will but tread
  Beneath our feet each deed of shame.

All common things, each day's events,
  That with the hour begin and end,
Our pleasures and our discontents,
  Are rounds by which we may ascend.

The low desire, the base design,
  That makes another's virtues less;
The revel of the ruddy wine,
  And all occasions of excess;

The longing for ignoble things;
  The strife for triumph more than truth;
The hardening of the heart, that brings
  Irreverence for the dreams of youth;

All thoughts of ill; all evil deeds,
  That have their root in thoughts of ill;
Whatever hinders or impedes
  The action of the nobler will.

All these must first be trampled down
  Beneath our feet, if we should gain
In the bright fields of fair renown
  The right of eminent domain.

We have not wings, we cannot soar;
  But we have feet to scale and climb
By slow degrees, by more and more,
  The cloudy summits of our time.

The mighty pyramids of stone
  That wedge-like cleave the desert airs,
When nearer seen, and better known,
  Are but gigantic flights of stairs.

The distant mountains, that uprear
  Their solid bastions to the skies,
Are crossed by pathways, that appear
  As we to higher levels rise.

The heights by great men reached and kept
  Were not attained by sudden flight,
But they, while their companions slept,
  Were toiling upward in the night.

Standing on what too long we bore
  With shoulders bent and downcast eyes,
We may discern—unseen before—
  A path to higher destinies.

Nor deem the irrevocable Past
  As wholly wasted, wholly vain,
If, rising on its wrecks, at last
  To something nobler we attain.

—LONGFELLOW.

By permission of Houghton, Mifflin & Co., Publishers.

POEM FOR READING AND DISCUSSION:

THE HERITAGE

The rich man's son inherits lands,
  And piles of brick and stone, and gold,
And he inherits soft white hands.
  And tender flesh that fears the cold,
  Nor dares to wear a garment old;
A heritage it seems to me,
One scarce would wish to hold in fee.

The rich man's son inherits cares;
  The banks may break, the factory burn,
A breath may burst his bubble shares,
  And soft white hands could hardly earn
  A living that would serve his turn;
A heritage it seems to me,
One scarce would wish to hold in fee.

The rich man's son inherits wants,
His stomach craves for dainty fare;
With sated heart, he hears the pants
Of toiling hands with brown arms bare
And wearies in his easy chair;
A heritage it seems to me,
One scarce would wish to hold in fee.

What doth the poor man's son inherit?
Stout muscles and a sinewy heart,
A hardy frame, a hardier spirit;
King of two hands, he does his part
In every useful toil and art;
A heritage it seems to me,
A king might wish to hold in fee.

What doth the poor man's son inherit?
Wishes o'erjoyed with humble things,
A rank adjudged by toil-won merit,
Content that from enjoyment springs,
A heart that in his labor sings;
A heritage it seems to me,
A king might wish to hold in fee.

What doth the poor man's son inherit?
A patience learned of being poor,
Courage, if sorrow come, to bear it,
A fellow-feeling that is sure
To make the outcast bless his door;
A heritage it seems to me,
A king might wish to hold in fee.

O rich man's son, there is a toil
That with all others level stands;
Large charity doth never soil,
But only whiten, soft, white hands—
This is the best crop from thy lands;
A heritage it seems to me,
Worth being rich to hold in fee.

O poor man's son, scorn not thy state;
There is worse weariness than thine,
In merely being rich and great;
Toil only gives the soul to shine,
And makes rest fragrant and benign;
A heritage it seems to me,
Worth being poor to hold in fee.

Both, heirs to some six feet of sod,
Are equal in the earth at last;
Both children of the same dear God,
Prove title to your heirship vast
By record of a well-filled past
A heritage it seems to me,
Well worth a life to hold in fee.

By permission of Houghton, Mifflin & Co., Publishers.

What is a heritage? What does the rich man's son inherit? the poor man's? Give the poet's advice to each. What lesson does the writer teach?

STORY FOR REPRODUCTION:

A CHILD'S DREAM OF A STAR

There was once a child, and he strolled about a good deal, and thought of a number of things. He had a sister, who was a child too, and his constant companion. These two used to wonder all day long. They wondered at the beauty of the flowers; they wondered at the height and the blueness of the sky; they wondered at the depth of the bright water; they wondered at the goodness and the power of God who made the lovely world.

They used to say to one another, sometimes, supposing all the children upon earth were to die, would the flowers, and the water, and the sky be sorry? They believed they would be sorry. For, said they, the buds are the children of the flowers, and the little playful streams that gambol down the hillsides are the children of the water; and the smallest bright specks playing at hide-and-seek in the sky all night, must surely be the children of the stars; and they would all be grieved to see their playmates, the children of men, no more.

There was one clear shining star that used to come out in the sky

before the rest, near the church-spire, above the graves. It was larger and more beautiful, they thought, than all the others, and every night they watched for it, standing hand in hand at the window. Whoever saw it first, cried out: "I see the star!" And often they cried out both together, knowing so well when it would rise, and where. So they grew to be such friends with it that before lying down in their beds, they always looked out once again, to bid it good-night; and when they were turning round to sleep, they used to say, "God bless the star."

But while she was still very young, O very, very young, the sister drooped, and came to be so weak that she could no longer stand in the window at night; and then the child looked sadly out by himself, and when he saw the star, turned round and said to the patient pale face on the bed, "I see the star!" And then a smile would come upon the face, and a little weak voice used to say, "God bless my brother and the star!"

And so the time came all too soon! when the child looked out alone, and when there was no face on the bed; and then there was a little grave among the graves, not there before; and when the star made long rays down towards him, as he saw it through his tears.

Now these rays were so bright, and they seemed to make such a shining way from the earth to heaven, that when the child went to his solitary bed, he dreamed about the star, and dreamed that, lying where he was, he saw a train of people taken up that sparkling road by angels. And the star, opening, showed him a great world of light, where many more such angels waited to receive them.

All these angels who were waiting, turned their beaming eyes upon the people who were carried up into the star; and some came out from the long rows in which they stood, and fell upon the people's necks, and kissed them tenderly, and went away with them down avenues of light, and were so happy in their company, that lying in his bed he wept for joy.

But there were many angels who did not go with them, and among them one he knew. The patient face that once had lain upon the bed was glorified and radiant, but his heart found out his sister among all the host. His sister's angel lingered near the entrance of the star and said to the leader among those who had brought the people thither,— "Is my brother come?" And he said, "No." She was turning hopefully away, when the child stretched out his arms and cried, "O sister, I am here! Take me!" And then she turned her beaming eyes upon him and it was night; and the star was shining into the room making long rays

down towards him as he saw it through his tears. From that hour forth the child looked out upon the star as upon the home he was to go to, when his time should come; and he thought that he did not belong to the earth alone, but to the star too, because of his sister's angel gone before.

There was a baby born to be a brother to the child; and while he was so little that he never yet had spoken a word, he stretched his tiny form out on his bed and died.

Again the child dreamed of the opened star and of the company of angels, and the train of people, and the rows of angels with their beaming eyes all turned upon those people's faces. Said his sister's angel to the leader, "Is my brother come?" And he said, "Not that one, but another." As the child beheld his brother's angel in her arms, he cried "O sister, I am here! Take me;" and she turned and smiled upon him, and the star was shining.

He grew to be a young man and was busy at his books, when an old servant came to him and said: "Thy mother is no more. I bring her blessing on her darling son!" Again at night, he saw the star, and all that former company. Said his sister's angel to the leader: "Is my brother come?" And he said, "Thy mother!"

A mighty cry of joy went forth through all the star because the mother was reunited to her two children. And he streched out his arms and cried, "O mother, sister, and brother, I am here! Take me!" And they answered him, "Not yet." And the star was shining.

He grew to be a man whose hair was turning gray, and he was sitting in his chair by the fireside, heavy with grief, and with his face bedewed with tears when the star opened once again.

Said his sister's angel to the leader, "Is my brother come?" And he said, "Nay, but his maiden daughter."

And the man, who had been the child saw his daughter newly lost to him, a celestial creature among those three, and he said, "My daughter's head is on my sister's bosom, and her arm is round my mother's neck, and at her feet there is the baby of old time, and I can bear the parting from her, God be praised!" And the star was shining.

Thus the child came to be an old man, and his once smooth face was wrinkled, and his steps were slow and feeble, and his back was bent. And one night as he lay upon his bed, his children standing round, he cried, as he had cried so long ago,—"I see the star!" They whispered one another, "He is dying." And he said, "I am. My age is falling from me like a garment, and I move towards the star as a

child. And, O my Father, now I thank thee that it has so often opened to receive those dear ones who await me!" And the star was shining; and it shines upon his grave.—CHARLES DICKENS.

Children, memorize this beautiful word picture after studying the flower and discussing the poem.

THE DAFFODILS

I wandered lonely as a cloud
That floats on high o'er vales and hills,
When all at once I saw a crowd,
A host of golden daffodils;
Beside the lake beneath the trees,
Fluttering and dancing in the breeze.

Continuous as the stars that shine
And twinkle on the milky way,
They stretched in never ending line
Along the margin of a bay;
Ten thousand saw I at a glance,
Tossing their heads in sprightly dance.

The waves beside them danced; but they
Out-did the sparkling waves in glee;
A poet could not but be gay,
In such a jocund company;
I gazed—and gazed—but little thought
What wealth the show to me had brought;

For oft, when on my couch I lie
In vacant or in pensive mood,
They flash upon that inward eye
Which is the bliss of solitude;
And then my heart with pleasure fills
And dances with the daffodils.

—WILLIAM WORDSWORTH.

Teacher, read the poem several times without comment. You have heard what a great poet thought and felt when he saw the daffodils. What pictures did you see while listening to the reading of the poem? Which one do you like best? What ideas are suggested by the words host? never ending?

crowd? by the words fluttering? dancing? tossing? sprightly? by the words golden? sparkling? flash? pensive? jocund? solitary? Compare the first line with the third line in third stanza.

What lines tell us of the joy the poet felt long after he saw the flowers? How did the scene bring wealth? Will gazing at and thinking about what is truly beautiful enable us to store up happiness for the future? Give illustrations. Paint picture the last three lines of first stanza makes you see.

POEM TO BE MEMORIZED AFTER THOUGHTFUL DISCUSSION:

THE SOLITARY REAPER

Behold her single in the field,
Yon solitary Highland lass!
Reaping and singing by herself;
Stop here or gently pass!
Alone she cuts and binds the grain,
And sings a melancholy strain;
Oh listen! for the vale profound
Is overflowing with the sound.

No nightingale did ever chant
More welcome notes to weary bands
Of travelers in some shady haunt,
Among Arabian sands.
A voice so thrilling ne'er was heard,
In spring-time from the cuckoo bird,
Breaking the silence of the seas
Among the farthest Hebrides.

* * * * * * *

Whate'er the theme, the maiden sang
As if her song could have no ending;
I saw her singing at her work,
And o'er the sickle bending;—
I listened, motionless and still;
And, as I mounted up the hill,
The music in my heart I bore,
Long after it was heard no more.

—WILLIAM WORDSWORTH.

In this poem the poet gives us a charming picture of a girl in the Highlands of Scotland. Lessons on "The Gleaners" by Millet and the "Song of the Lark" by Breton will help children to appreciate this literary gem. Read to children extracts from Burrough's "Search for a Nightingale." Recall the story of "The Child of the Desert" by Jane Andrews. Visit in imagination the Hebrides—rocky islands far out in the ocean—seldom visited by people. The nightingale is renowned for its sweet song; it sings in quiet places and is often heard at midnight. The cuckoo is also a noted songster.

Teacher, read poem and help children to see the pictures. Find lines that tell what the maiden is doing. Read the first two lines of each stanza. Read the last two lines of each stanza. Do you see the weary travelers? the Scotch lass singing and working? Wordsworth motionless and still? Which picture do you like best in this poem? The song made a lasting impression on the poet. What reason have we for thinking so? Read the last two lines of "The Daffodils." Compare with the last lines of "The Reaper."

STUDY OF POEM

DRIFTING

My soul to-day
Is far away,
Sailing the Vesuvian Bay;
My winged boat,
A bird afloat,
Swims round the purple peaks remote.

Round purple peaks
It sails, and seeks
Blue inlets and their crystal creeks,
Where high rocks throw,
Through deeps below,
A duplicated golden glow.

Far, vague and dim
The mountains swim;
While on Vesuvius' misty brim,
With outstretched hands,
The gray smoke stands,
O'erlooking the volcanic lands.

In lofty lines,
'Mid palms and pines,
And olives, aloes, elms and vines,
Sorrento swings,
On sunset wings,
Where Tasso's spirit soars and sings.

Here Ischia smiles
O'er liquid miles,
And yonder, bluest of the isles,
Calm Capri waits,
Her sapphire gates
Beguiling to her bright estates.

I heed not, if
My rippling skiff
Float swift or slow from cliff to cliff;—
With dreamful eyes
My spirit lies
Under the walls of Paradise.

Under the walls,
Where swells and falls
The bay's deep breast at intervals,
At peace I lie,
Blown softly by,
A cloud upon this liquid sky.

With dreamful eyes
My spirit lies,
Where Summer sings and never dies
O'erveiled with vines,
She glows and shines
Among her future oil and wines.

No more, no more
The worldly shore
Upbraids me with its wild uproar!
With dreamful eyes
My spirit lies
Under the walls of Paradise!

—THOMAS BUCHANAN READ (Abridged).

By permission of J. B. Lippincott Co.

Aim.—To familiarize children with a choice word painting.

Preparation.—Review lessons on the Bay of Naples, Vesuvius, Sorrento, Ischia and Capri. Recall the fact that Sorrento in the days of Augustus rivaled the beautiful city of Naples.

Stoddard writes: "A jewel rivaling even Capri in the gorgeous setting of the Bay of Naples, is the island of Ischia, which every year for centuries, has siren-like, lured thousands of admirers to the sea-girt cliffs."

Presentation.—Teacher, read the poem to children several times without comment. Ask them to imagine the pictures while listening to the words. Do you see the winged boat? Where is it sailing? What seeking? Think how "purple peaks," "liquid miles," "crystal creeks," "misty brim,"—all help you to see what the poet saw. Find expressions in the poem that suggest bright sparkling pictures—"duplicated golden glow," "sunset swings," "sapphire gates." Find expressions that suggest distance?—"Peaks remote," "far, vague and dim." Color?—"Bluest isles," "gray smoke," etc. Compare picture of Sorrento with picture of Ischia. Describe "Capri" and compare with Sorrento. What trees named in the poem have you not seen? What lines suggest delightful climate? What stanzas suggest peace and contentment? Paint two pictures the poet makes you see. Memorize poem.

CHILDREN MEMORIZE:

Dwells within the soul of every artist
More than all his efforts can express;
And he knows the best remains unuttered
Sighing at what WE call his success.

No great thinker ever lived and taught you
All the wonders that his soul received;
No true painter ever set on canvas
All the glorious visions he conceived.

No musician ever held your spirit
Charmed and bound in his melodious chains,
But be sure he heard, and strove to render
Feeble echoes of celestial strains.

No real poet ever wove in numbers
All his dreams; but the diviner part,
Hidden from all the world, spoke to him only
In the voiceless silence of his heart.

—ADELAIDE PROCTOR.

POEM FOR READING AND DISCUSSION. Study "Christ Blessing Little Children" in connection with this poem.

CHRIST AND THE LITTLE ONES

"The Master has come over Jordan,"
Said Hannah the mother one day;
"He is healing the people who throng Him,
With a touch of His finger they say.
"And now I shall take Him the children,
Little Rachel and Samuel and John,
I shall carry the baby Esther,
For the Lord to look upon."

The father looked at her kindly,
But he shook his head and smiled;
"Now who but a doting mother
Would think of a thing so wild?

"If the children were tortured by demons,
Or dying of fever, 'twere well;
Or had they the taint of the leper,
Like many in Israel."

"Nay, do not hinder me, Nathan;
I feel such a burden of care,
If I carry it to the Master,
Perhaps I shall leave it there.
If He lay His hand on the children,
My heart will be lighter, I know;
For a blessing forever and ever
Will follow them as they go."

So over the hills of Judah,
Along by the vine-rows green,
With Esther asleep on her bosom,
And Rachel her brothers between;
'Mid the people who hung on His teaching,
Or waited His touch or His word,—
Through the row of proud Pharisees listening
She pressed to the feet of the Lord.

"Now, why shouldst thou hinder the Master,"
Said Peter, "with children like these?
Seest thou how from morning till evening
He teacheth and healeth disease?"
Then Christ said, "Forbid not the children,
Permit them to come unto me!"
And He took in His arms little Esther,
And Rachel He set on His knee;

And the heavy heart of the mother
Was lifted all earth-care above,
As He laid His hands on the brothers,
And blest them with tenderest love;
And He said of the babes in His bosom,
"Of such are the kingdom of heaven"—
And strength for all duty and trial,
That hour to her spirit was given.

—JULIA GILL.

Literature and Art.—McBride, Publishers.

THE LARK—*By Jules Adolphe Breton*

STUDY OF POEM

CHILDREN MEMORIZE THE POEM AFTER CLASS DISCUSSION.

Each stanza paints a beautiful picture.

TO A SKYLARK

Hail to thee, blithe spirit!
Bird thou never wert,
That from heaven, or near it,
Pourest thy full heart
In profuse strains of unpremediated art.

Higher and still higher,
From the earth thou springest
Like a cloud of fire;
The blue deep thou wingest,
And singing still dost soar, and soaring ever singest.

In the golden lightning
Of the sunken sun,
O'er which clouds are bright'ning,
Thou dost float and run,
Like an unbodied joy whose race is just begun.

The pale purple even
Melts around thy flight;
Like a star of heaven,
In the broad daylight
Thou art unseen, but yet I hear thy shrill delight.

* * *

All the earth and air
With thy voice is loud,
As, when night is bare,
From one lonely cloud
The moon rains out her beams, and heaven is overflowed.

What thou art we know not;
What is most like thee?
From rainbow clouds there flow not
Drops so bright to see,
As from thy presence showers a rain of melody.

Like a poet hidden
In the light of thought,
Singing hymns unbidden,
Till the world is wrought
To sympathy with hopes and fears it heeded not.

* * *

Teach us, sprite or bird,
What sweet thoughts are thine:
I have never heard
Praise of love or wine
That panted forth a flood of rapture so divine.

We look before and after,
And pine for what is not;
Our sincerest laughter
With some pain is fraught;
Our sweetest songs are those that tell of saddest thought.

* * *

Better than all measures
Of delightful sound,
Better than all treasures
That in books are found,
Thy skill to poet were, thou scorner of the ground.

Teach me half the gladness
That thy brain must know,
Such harmonious madness
From my lips would flow,
The world should listen then, as I am listening now.

—PERCY BYSSHE SHELLEY.

(Abridged.)

Compare Shelley's Tribute to the Skylark with Jas. Hogg's.

THE SKYLARK

Bird of the wilderness,
Blithesome and cumberless,
Sweet be thy matin o'er moorland and lea!
Emblem of happiness,
Blest is thy dwelling place—
Oh, to abide in the desert with thee!

Wild is thy lay and loud,
Far in the downy cloud,
Love gives it energy, love gave it birth,
Where, on thy dewy wing,
Where art thou journeying?
Thy lay is in heaven, thy love is on earth.

O'er fell and fountain sheen,
O'er moor and mountain green,
O'er the red streamer that heralds the day,
O'er the cloudlet dim,
O'er the rainbow's rim,
Musical cherub, soar, singing away!

Then when the gloaming comes,
Low in the heather blooms
Sweet will thy welcome and bed of love be!
Emblem of happiness,
Blest is thy dwelling place,
Oh, to abide in the desert with thee!

—JAS. HOGG.

THE RETURN OF COLUMBUS

The fame of the discovery made by Columbus had resounded throughout the nation, and, as his route lay through several of the finest and most populous provinces of Spain, his journey appeared like the progress of a sovereign.

Wherever he passed, the country poured forth its inhabitants, who lined the road and thronged the villages. The streets, windows and balconies of the towns were filled with eager spectators, who rent the air with acclamations.

His journey was continually impeded by the multitude pressing to gain a sight of him and of the Indians, who were regarded with as much astonishment as if they had been natives of another planet.

It was impossible to satisfy the craving curiosity, which assailed himself and his attendants at every stage with innumerable questions. Popular rumor, as usual, had exaggerated the truth, and had filled the newly found country with all kind of wonders.

About the middle of April, Columbus arrived at Barcelona, where every preparation had been made to give him a solemn and magnificent reception. The beauty and serenity of the weather in that genial season

and favored climate contributed to give splendor to this memorable ceremony. As he drew near the place, many of the more youthful courtiers and hidalgos, together with a vast concourse of the populace, came forth to meet and welcome him. His entrance into this noble city has been compared to one of those triumphs which the Romans were accustomed to decree to conquerors. First were paraded the Indians, painted according to their savage fashion, and decorated with their national ornaments of gold; after these were borne various kinds of live parrots, together with stuffed birds and animals of unknown species, and rare plants supposed to be of precious qualities; while great care was taken to make a conspicuous display of Indian coronets, bracelets, and other decorations of gold, which might give an idea of the wealth of the newly discovered regions. After this followed Columbus on horse back, surrounded by a brilliant cavalcade of Spanish chivalry.

The streets were almost impassable from the countless multitude; the windows and balconies were crowded with the fair; the very roofs were covered with spectators. It seemed as if the public eye could not be sated with gazing on these trophies of an unknown world, or on the remakable man by whom it had been discovered.

There was sublimity in this event that mingled a solemn feeling with the public joy. It was looked upon as a vast and signal dispensation of Providence in reward for the piety of the monarchs; and the majestic and the venerable appearance of the discoverer, so different from the youth and buoyancy generally expected from roving enterprise, seemed in harmony with the grandeur and dignity of his achievements.

To receive him with suitable pomp and distinction, the sovereigns had ordered their throne to be placed in public, under a rich canopy of brocade of gold, in a vast and splendid saloon. Here, the king and queen awaited his arrival, seated in state, with the Prince Juan beside them, and attended by the dignitaries of their court, and the principal nobility of Castile, Valencia, Catalonia and Aragon, all impatient to behold the man who had conferred so incalculable a benefit upon the nation. "At length, Columbus entered the hall, surrounded by a brilliant crowd of cavaliers," among whom, says Las Casas, "he was conspicuous for his stately and commanding person, which, with his countenance rendered venerable by his gray hairs, gave him the august appearance of a senator of Rome. A modest smile lighted up his features, showing that he enjoyed the state and glory in which he came; and certainly nothing could be more deeply moving to a mind inflamed by noble ambition, and conscious of having greatly deserved, than these testimonials of

admiration and gratitude of a nation, or rather of a world. As Columbus approached, the sovereigns rose, as if receiving a person of the highest rank. Bending his knees, he offered to kiss their hands; but there was some hesitation on their part to permit this act of homage. Raising him in the most gracious manner, they ordered him to seat himself in their presence; a rare honor in this proud and punctilious court."

At their request, he now gave an account of the most striking events of his voyage, and a description of the islands discovered. He displayed specimens of unknown birds and other animals; of rare plants of medicinal and aromatic virtues, of native gold in dust and crude masses, or labored into barbaric ornaments; and, above all, the natives of these countries, who are objects of intense and inexhaustible interest. All these he pronounced mere harbingers of greater discoveries yet to be made, which would add realms of incalculable wealth to the dominions of their majesties, and the whole nations of proselytes to the true faith.

When he had finished, the sovereigns sank on their knees, and, raising their clasped hands to heaven, their eyes filled with tears of joy and gratitude, poured forth thanks and praises to God for so great a providence; all present followed their example; a deep and solemn enthusiasm pervaded that splendid assembly, and prevented all common acclamations of triumph. The anthem, "Te Deum Laudamus," chanted by the choir of the royal chapel, with the accompaniment of instruments, rose in full body of sacred harmony, bearing up, as it were, the feelings and thoughts of the auditors to heaven, "so that," says the venerable Las Casas, "It seemed as if in that hour they communicated with the celestial delights."

Such was the solemn and pious manner in which the brilliant court of Spain celebrated this sublime event; offering up a grateful tribute of melody and praise and giving glory to God for the discovery of another world.

—WASHINGTON IRVING.

By permission of Putman's Sons.

After discussing "The Return of Columbus" read "Columbus," and help the children to see the brave admiral as his frail ship was tossing on a "mad sea" "that night of all dark nights."

COLUMBUS.

(Taken from the complete Works of Joaquin Miller, copyrighted, by permission of the Publishers, The Whitaker and Ray Company, San Francisco.)

Behind him lay the gay Azores,
  Behind the Gates of Hercules,
Before him not the ghost of shores,
  Before him only shoreless seas.
The good mate said, "Now must we pray,
  For, lo, the very stars are gone;
Speak, Admiral, now what shall I say?"
  "Why, say, 'Sail on, sail on, sail on and on!' "

"My men grow mutinous day by day,
  My men grow ghastly, wan, and weak;"
The stout mate thought of home; a spray
  Of salt wave washed his cheek.
"What shall I say, brave Admiral, say,
  If we sight naught but seas at dawn?"
"Why, you may say at break of day,
  'Sail on, sail on, sail on and on!' "

They sailed and sailed as winds might blow,
  Until at last the blanched mate said:
"Why, now, not even God would know
  Should I and all my men fall dead.
These very winds forget their way,
  For God from these dread seas is gone.
Now speak, brave Admiral, speak and say!"
  He said: " 'Sail on, sail on, sail on and on!' "

They sailed, they sailed, then spoke the mate:
  "This mad sea shows his teeth to-night;
He curls his lips, he lies in wait
  With lifted teeth as if to bite.
Brave Admiral, say but one good word,
  What shall we do when hope is gone?"

---

*In a recent critical article, in the London *Athenæum* is the sentence: "In point of power, workmanship and feeling, among all the poems written by Americans, we are inclined to give first place to the 'Port of Ships' (or 'Columbus') by Joaquin Miller."

The words leaped as a leaping sword:
"'Sail on, sail on, sail on and on!'"

Then sad and worn he kept his deck
And peered through darkness—oh, that night
Of all dark nights!—and then a speck,
"A light! A light! A light! A light!"
It grew, a starlit flag unfurled;
It grew to be Time's burst of dawn.
He gained a world; he gave that world
Its grandest lesson: "On! sail on."

STUDY OF POEM

THE LEGEND BEAUTIFUL

"Had'st thou staid, I must have fled!"
That is what the Vision said.

In his chamber all alone,
Kneeling on the floor of stone,
Prayed the monk in deep contrition
For his sins of indecision,
Prayed for greater self-denial,
In temptation and in trial;
It was noonday by the dial,
And the monk was all alone.

Suddenly, as if it lightened,
An unwonted splendor brightened
All within him and without him,
In that narrow cell of stone;
And he saw the Blessed Vision,
Of our Lord with light Elysian,
Like a vesture wrapped about him,
Like a garment round him thrown.

In an attitude imploring,
Hands upon his bosom crossed,
Wondering, worshiping, adoring,
Knelt the monk in rapture lost.

Lord, he thought, in heaven that reignest,
Who am I, that thus thou deignest,
To reveal thyself to me?
Who am I, that from the centre
Of thy glory, thou shouldst enter
This poor cell, my guest to be?

Then amid his exaltation,
Loud the convent bell appalling,
From its belfry calling, calling,
Rang through court and corridor,
With persistent iteration
He had never heard before.

It was now the appointed hour,
When alike in shine or shower,
Winter's cold or summer's heat,
To the convent portals came
All the blind and halt and lame,
All the beggars of the street,
For their daily dole of food,
Dealt them by the brotherhood;

And their almoner was he,
Who upon his bended knee,
Rapt in silent ecstasy
Of divinest self-surrender,
Saw the Vision and the Splendor.

Deep distress and hesitation,
Mingled with his adoration;
Should he go, or should he stay?
Should he leave the poor to wait,
Hungry at the convent gate,
Till the Vision passed away?
Should he slight his radiant guest,
Slight this visitant celestial,
For a crowd of ragged, bestial
Beggars at the convent gate?

Would the Vision there remain?
Would the Vision come again?
Then a voice within his breast

Whispered, audible and clear,
As if to the outward ear:
"Do thy duty; that is best;
Leave unto the Lord the rest!"

Straightway to his feet he started,
And with longing look intent
On the Blessed Vision bent,
Slowly from his cell departed,
Slowly on his errand went.

At the gate the poor were waiting,
Looking through the iron grating,
With that terror in the eye,
That is only seen in those
Who amid their wants and woes,
Hear the sound of doors that close,
And of feet that pass them by;
Grown familiar with the savor
Of the bread by which men die;

But to-day, they knew not why,
Like the gate of Paradise,
Seemed the convent gate to rise,
Like a sacrament divine,
Seemed to them the bread and wine.
In his heart the monk was praying,
Thinking of the homeless poor,
What they suffer and endure;
What we see not, what we see;
And the inward voice was saying;
"Whatsoever thing thou doest
To the least of mine and lowest,
That thou doest unto me!"

Unto me! but had the Vision
Come to him in beggar's clothing,
Come a mendicant imploring,
Would he then have knelt adoring
Or have listened with derision,
And have turned away with loathing?

Thus his conscience put the question,
Full of troublesome suggestion,
As at length, with hurried pace,
Towards his cell he turned his face,
And beheld the convent bright,
With a supernatural light,
Like a luminous cloud expanding,
Over floor and wall and ceiling.

But he paused with awe-struck feeling
At the threshold of his door,
For the Vision still was standing
As he left it there before,
When the convent bell appalling,
From its belfry calling, calling,
Summoned him to feed the poor.

Through the long hour intervening
It had waited his return,
And he felt his bosom burn,
Comprehending all the meaning,
When the Blessed Vision said:
"Had'st thou stayed, I must have fled!"

—LONGFELLOW.

By permission, Houghton, Mifflin Co.

FOR DISCUSSION AND REPRODUCTION:

THE PIED PIPER OF HAMELIN

Hamelin Town's in Brunswick,
By famous Hanover city,
The river Weser deep and wide
Washes its wall on the southern side;
A pleasanter spot you never spied;
But, when begins my ditty,
Almost five hundred years ago,
To see the town folks suffer so
From vermin, was a pity.
Rats!
They fought the dogs and killed the cats,
And bit the babies in their cradles,
And ate the cheeses out of the vats,

And licked the soup from the cook's own ladles,
Split open the kegs of salted sprats,
Made nests inside men's Sunday hats,
And even spoiled the women's chats,
By drowning their speaking
With shrieking and squeaking,
In fifty different sharps and flats.
At last the people in a body,
To the town-hall came flocking;
* * *
An hour they sat in council,
At length the mayor broke silence:
"For a guilder I'd my ermine gown sell;
* * *
Oh, for a trap, a trap, a trap!"
Just as he said this, what should hap
At the chamber door but a gentle tap?
"Bless us," cries the mayor, "what's that?
Anything like the sound of a rat
Makes my heart go pit-a-pat!
"Come in," the mayor cried looking bigger,
And in did come the strangest figure!
His queer long coat, from heel to head,
Was half of yellow and half of red;
And he himself was tall and thin,
With sharp blue eyes, each like a pin
And light, loose hair, yet swarthy skin,
No tuft on cheek, nor beard on chin,
But lips where smiles went out and in.
There was no guessing his kith or kin!
And nobody could enough admire
The tall man and his quaint attire.
* * *
He advanced to the council table:
And, "Please your honors," said he, "I'm able,
By means of a secret charm, to draw
All creatures living beneath the sun,
That creep, or swim, or fly, or run,
After me so as you never saw!
And I chiefly use my charm

On creatures that do people harm,
The mole, the toad, the newt, the viper;
And people call me the Pied Piper.
* * *
Will you give me a thousand guilders?"
"One? Fifty thousand! was the exclamation
Of the astonished mayor and corporation.
Into the street the Piper stept,
Smiling first a little smile,
As if he knew what magic slept
In his quiet pipe the while;
Then, like a musical adept,
To blow the pipe his lips he wrinkled
Like a candle flame where salt is sprinkled;
And ere three shrill notes the pipe had uttered,
You heard as if an army muttered;
And the muttering grew to a grumbling;
And the grumbling grew to a mighty rumbling,
And out of the houses the rats came tumbling.
Great rats, small rats, lean rats, brawny rats,
Brown rats, black rats, gray rats, tawny rats,
Grave old plodders, gay young friskers,
Fathers, mothers, uncles, cousins,
Cocking tails and pricking whiskers,
Families by tens and dozens,
Brothers, sisters, husbands, wives—
Followed the Piper for their lives,
From street to street he piped advancing,
And step for step they followed dancing
Until they came to the river Weser,
Wherein all plunged and perished,
Save one, who stout as Julius Caesar,
Swam across, and lived to carry
(As he, the manuscript he cherished)
To Rat-land home his commentary.
* * *
You should have heard the Hamelin people
Ringing the bells till they rocked the steeple;
"Go," cried the mayor, "and get long poles!
Poke out the nests and block up the holes,

Consult with carpenters and builders,
And leave in our town not even a trace
Of the rats!" When suddenly, up the face
Of the Piper perched in the market-place,
With a "First, if you please my thousand guilders!"
"A thousand guilders!" The Mayor looked blue,
So did the corporation, too.
* * *
To pay this sum to a wandering fellow
With a gypsy coat of red and yellow!
"Besides," quoth the mayor, with a knowing wink,
"Our business was done at the river's bank;
* * *
But as for the guilders, what we spoke
Of them, as you very well know, was in joke.
Beside our losses have made us thrifty:
A thousand guilders! Come take fifty!"
The Pipers face fell, and he cried,
"No trifling! I can't wait! beside
I've promised to visit by dinner-time
Bagdat, * * *
And folks who put me in a passion
May find me pipe after another fashion."
* * *
"You threaten us, fellow? Do your worst,
Blow your pipe there till you burst."
Once more he stept into the street,
And to his lips again
Laid his long pipe of smooth, straight cane;
And ere he blew three notes (such sweet
Soft notes as yet musician's cunning
Never gave the enraptured air),
There was a rustling that seemed like a bustling,
Of merry crowds justling at pitching and hustling.
Small feet were pattering, wooden shoes clattering,
Little hands clapping and little tongues chattering,
And, like fowls in a farm-yard where barley is scattering,
Out came the children running.
All the little boys and girls,
With rosy cheeks and flaxen curls,

And sparkling eyes and teeth like pearls,
Tripping and skipping, ran merrily after
The wonderful music with shouting and laughter.
The mayor was dumb, and the council stood
As if they were changed into blocks of wood,
Unable to move a step or cry
To the children merrily skipping by—
And could only follow with the eye
That joyous crowd at the Piper's back,
And now the mayor was on the rack,
And the wretched council's bosoms beat,
As the Piper turned from the High Street
To where the Weser rolled its waters
Right in the way of their sons and daughters!
However, he turned from south to west,
And to Koppelberg Hill his step addressed;
And after him the children pressed;
Great was the joy in every breast.
"He never can cross that mighty top;
He's forced to let the piping drop,
And we shall see our children stop!"
When lo, as they reached the mountain's side,
A wondrous portal opened wide,
As if a cavern was suddenly hollowed;
And the Piper advanced and the children followed;
And when all were in to the very last,
The door in the mountain side shut fast;
Did I say, all? No! One was lame,
And could not dance the whole of the way;
And in after years if you would blame
His sadness, he was used to say,—
It's dull in our town since my playmates left!
I can't forget that I'm bereft
Of all the pleasant sights they see
Which the Piper also promised me;
For he led us, he said, to a joyous land,
Joining the town and just at hand,
Where waters gushed and fruit-trees grew,
And flowers put forth a fairer hue,
And everything was strange and new;

The sparrows were brighter than peacocks here
And their dogs outran our fallow-deer,
And honey bees had lost their stings,
And horses were born with eagles' wings;
And just as I became assured
My lame foot would be speedily cured,
The music stopped and I stood still,
And found myself outside the hill,
Left alone against my will,
To go now limping as before,
And never hear of that country more!"
Alas! Alas for Hamelin!

* * *

The mayor sent east, west, north and south,
To offer the Piper by word of mouth,
Wherever it was men's lot to find him,
Silver and gold to his heart's content,
If he'd only return the way he went,
And bring the children behind him.
But when they saw 'twas a lost endeavor,
The Piper and dancers were gone forever.

* * *

The place of the children's last retreat,
They called it the Pied Piper's Street—
Where any one playing on pipe or tabor
Was sure for the future to lose his labor
Nor suffered they hostelry or tavern
To shock with mirth a street so solemn;
But opposite the place of the cavern
They wrote the story on a column.

* * *

So Willy, let you and me be wipers
Of scores out with all men—especially pipers;
And, whether they pipe us free from rats or mice,
If we've promised them aught, let us keep our promise.

—Robert Browning.

OUR FLAG

Teacher, review briefly the story of our country's trouble with England. Show pictures of different flags and tell the children when and by whom the first United States flag was made. Explain the meaning of symbolism of the colors in our flag.

White stands for purity, hope and peace; red signifies courage, defiance and readiness to die for a just cause; and blue is a symbol of justice, loyalty and truthfulness.

CHILDREN MEMORIZE:

THE AMERICAN FLAG

When Freedom, from her mountain height,
Unfurled her standard to the air,
She tore the azure robe of night,
And set the stars of glory there.
She mingled with its gorgeous dyes
The milky baldric of the skies,
And striped its pure celestial white
With streakings of the morning light;
Then from his mansion in the sun
She called her eagle bearer down,
And gave unto his mighty hand
The symbol of her chosen land.

* * * *

Flag of the free heart's hope and home!
By angel hands to valor given;
Thy stars have lit the welkin dome,
And all thy hues were born in heaven.
Forever float that standard sheet!
Where breathes the foe but falls before us,
With Freedom's soil beneath our feet,
And Freedom's banner streaming o'er us?

—JOSEPH RODMAN DRAKE.

STORY OF THE STAR SPANGLED BANNER

This song was written during our second war with England. In 1814 Fort Henry (guarding the entrance to Baltimore) was unsuccessfully bombarded by the British. A young lawyer named Francis Scott Key was held as a prisoner on board one of the English ships and all night he watched eagerly to see by "the rockets' red glare" if the flag he loved so well was still waving over the fort. The flag was the one adopted in 1794 consisting of fifteen stripes. It was forty feet long and twenty-nine feet wide. The stripes were nearly two feet wide and the stars were each two feet from point to point. When daylight came Key's joy knew no bounds; the Star Spangled banner was still waving and he gave expression to his feelings in the following poem that we should all know and love:

"THE STAR SPANGLED BANNER"

O, say, can you see by the dawn's early light,
What so proudly we hailed at the twilight's last gleaming?
Whose broad stripes and bright stars, through the perilous fight
O'er the ramparts we watched, were so gallantly streaming!
And the rockets' red glare, the bombs bursting in air,
Gave proof through the night that our flag was still there;
O say, does that star-spangled banner yet wave
O'er the land of the free and the home of the brave?

On that shore dimly seen through the mists of the deep,
Where the foe's haughty host in dread silence reposes,
What is that which the breeze, o'er the towering steep,
As it fitfully blows, half conceals, half discloses?
Now it catches the gleam of the morning's first beam,
In full glory reflected, now shines on the stream;
'Tis the star spangled banner! O long may it wave
O'er the land of the free and the home of the brave!

And where is that band who so vauntingly swore
That the havoc of war and the battles confusion
A home and a country should leave us no more?
Their blood hath washed out their foul footsteps' pollution.

No refuge could save the hireling and slave
From the terror of flight or the gloom of the grave;
And the star spangled banner in triumph doth wave,
O'er the land of the free and the home of the brave!

O, thus be it ever when freemen shall stand,
Between their loved home and the war's desolation!
Blest with vict'ry and peace, may the Heaven-rescued land
Praise the Power that hath made and preserved us a nation,
Then conquer we must, for our cause it is just,
And this be our motto, "In God is our trust;"
And the star spangled banner in triumph shall wave,
O'er the land of the free and the home of the brave!

—FRANCIS SCOTT KEY

SALUTE TO OUR FLAG

Our Flag! May your folds ever wave on the breeze
As an emblem of peace on land and on seas.
A sign of our courage the red of the dawn
Which flushes the sky at the day's early morn;
A symbol of loyalty, tender and true,
We take from the sky its own beautiful blue;

For purity, innocence, loyalty, right
We've chosen the color most fitting—pure white!
What a story you tell, to countries and climes!
What a lesson you teach to ages and times!
In your stars and your bars the whole world may see
You stand for a nation, the home of the free!

We salute you, dear Flag, with your red and white bars,
May your * Union * shine ever with glorious stars,
Your folds shelter freemen; as years roll along
May all nations and people learn liberty's song.
We promise you here that we'll always be true
And, if need be, we'll die for the "Red, White, and Blue."

—B. ELLEN BURKE.

The UNION of the United States flag is the upper, inner corner; the rest of the flag is called the FLY.

THE BLUE AND THE GRAY

(The women of Columbus, Mississippi, strewed flowers alike on the graves of the Confederate and the National soldiers.)

CHILDREN MEMORIZE:

By the flow of the inland river,
Whence the fleets of iron have fled,
Where the blades of the grave grass quiver,
Asleep are the ranks of the dead:
Under the sod and the dew,
Waiting the judgment day;
Under the one, the Blue,
Under the other, the Gray.

These in the robings of glory,
Those, in the gloom of defeat,
All with the battle blood gory,
In the dusk of eternity meet;
Under the sod and the dew,
Waiting the judgment day;
Under the laurel, the Blue,
Under the willow, the Gray.

From the silence of sorrowful hours,
The desolate mourners go,
Lovingly laden with flowers,
Alike for the friend and the foe:
Under the sod and the dew,
Waiting the judgment day;
Under the roses, the Blue,
Under the lilies, the Gray.

So, with an equal splendor,
The morning sun-rays fall,
With a touch impartially tender,
On the blossoms blooming for all:
Under the sod and the dew,
Waiting the judgment day;
Broidered with gold, the Blue,
Mellowed with gold, the Gray.

So, when the summer calleth,
On forest and field of grain,
With an equal murmur falleth,
The cooling drip of the rain:
Under the sod and the dew,
Waiting the judgment day;
Wet with the rain, the Blue,
Wet with the rain, the Gray.

Sadly, but not with upbraiding,
The generous deed was done;
In the storm of years that are fading,
No braver battle was won:
Under the sod and the dew,
Waiting the judgment day;
Under the blossoms, the Blue,
Under the garlands, the Gray.

No more shall the war cry sever,
Or the winding rivers be red;
They banish our anger forever,
When they laurel the graves of our dead!
Under the sod and the dew,
Waiting the judgment day;
Love and tears for the Blue,
Tears and love for the Gray.

—FRANCIS MILES FINCH.

CHILDREN MEMORIZE:

BATTLE HYMN OF THE REPUBLIC

Mine eyes have seen the glory of the coming of the Lord;
He is tramping out the vintage where the grapes of wrath are stored
He hath loosed the fateful lightning of his terrible swift sword;
His truth is marching on.

I have seen him in the watch-fires of a hundred circling camps;
They have builded him an altar in the evening dews and damps:
I have read his righteous sentence by the dim and flaring lamps:
His day is marching on.

I have read a fiery gospel writ in burnished rows of steel;
"As ye deal with my contemners, so with you my grace shall deal;
Let the hero, born of woman, crush the serpent with his heel;
Since God is marching on."

He has sounded forth the trumpet that shall never call retreat;
He is sifting out the hearts of men before his judgment seat;
Oh, be swift, my soul, to answer him! be jubilant, my feet!
Our God is marching on.

In the beauty of the lilies, Christ was born across the sea,
With a glory in his bosom that transfigures you and me;
As he died to make men holy, let us die to make men free,
While God is marching on.

—JULIA WARD HOWE.

Houghton, Mifflin & Co., Publishers

CHAPTER VI

PICTURE STUDY

Picture study is a very essential part of a school course and, while it is not expected that all the school children of to-day will become artists, all, or at least the majority, should be taught to appreciate and enjoy what is best in the works of the great masters.

Literature, history, geography, and nature study, all afford opportunities for illustrative drawing to be done by the children. As an aid to such work it would be well to stock a portfolio with drawings and pictures appropriate to the season of the year. It must be remembered, however, that a description of an object by means of a drawing is not the highest use of art any more than a mere word description of an object is the highest use of language. The children should be given abundant opportunity for original expression, and at the same time they should be helped to form right ideals of true art. Intelligent picture study in our schools will help to bring the child into communion with master minds, and it will also help to develop his creative powers.

"The Riverside Art Series" by Estelle Hurll, "Christian Art" by Eliza Allen Starr, "How to Enjoy Pictures" by M. S. Emery, "The Christ-Child in Art" by John Van Dyke, and "Legends of the Madonna" by Mrs. Jameson will give the teacher larger conceptions of the possibilities of art and enable her to lead her pupils to look for correct art principles exemplified in the works of the great artists. "Great Artists" by Henry Turner Bailey describes the lives of sixteen of the most noted artists. As these little

books are but ten cents each, every teacher should own them.

A keen sense of beauty can be acquired in childhood by familiarity with beautiful things. The child drinks in his surroundings and is formed by them unconsciously, and he should be given an opportunity to see and to enjoy good copies of some of the great pictures of the world. The choice is infinite, but only the appropriate, the purposeful, should be chosen.

Art-culture and soul-culture should be the first consideration. If we wish children to think beautiful thoughts we must place before them only what is noble, lovely, and inspiring.

Little children, it is true, are easily pleased with bright colors and showy objects; the aim, however, is not simply to please, but to educate. The children will not be likely to understand the masterpieces, it is true; their educative influence nevertheless is far greater than pictures that can be understood at a glance.

Anna Bracket says: "It makes no difference to you or to the rest of the world what you may think of any great work of art. This is not the question; the point is how it affects you. The picture is the judge of your capacity, not you of its excellence. The world has long ago perhaps passed judgment upon it and now it is for the work to estimate you. If, without knowing that a certain picture is from the hands of a great master, you find yourself wonderfully attracted by it you may be glad that its verdict upon you is favorable."

A picture must be studied and interpreted before it will yield its fullest, deepest meaning. "Though we travel the world over to find the beautiful we must carry it with us or we find it not."

The following list of pictures is recommended by Miss Henrietta Thornton, professor of art in the Iowa State Normal School. The teachers of Iowa will be grateful for Miss Thorn-

ton's suggestions on any subject pertaining to art, especially all those who have had the advantages of her instruction:

GRADE I.

"A Piper and a Pair of Nut Crackers".....Landseer
"Highland Dogs".....Landseer
"Madonna of the Chair".....Raphael
"Baby Stuart".....Van Dyck
"Feeding the Nestlings".....Millet
"The Cherubs" (a fragment from Raphael's Sistine Madonna.)
"St. Anthony of Padua and the Christ-Child".....Murillo
"Christ blessing Little Children".....Plockhorst
"Can't You Talk?".....Holmes
"Age of Innocence".....Reynolds

In each of these four lower grades I would suggest at least one bas-relief form from—

"The Singing Gallery of the Cathedral".....Lucca della Robbia
"Four Little Scamps are We".....J. Adam
"The Little Brother".....Meyer Von Bremen
"Learning the A B C".....De Freger
"Friend Fox".....E. Long

GRADE II.

"A Distinguished Member of the Humane Society".....Landseer
"The Prize Calf".....Landseer
"The Ornithologist".....Millais
"Baby's First Step".....Millet
"Angels' Heads".....Reynolds
"Kittens".....Adams
"Arrival of the Shepherds".....Lerolle
"A Modern Madonna".....De Freger
"In the Country".....Lerolle
"Sistine Madonna".....Raphael
"The Divine Shepherd".....Murillo
"Song of the Lark".....Breton
"Grandpa's Pet".....Artz
"See What Mother Has Brought Home".....Meyer Von Bremen

GRADE III.

"The Three Children of Charles I".....Van Dyck
"The Sheep Pasture".....Jacque
"Feeding the Chickens".....Millet
"The Dance of Apollo and the Muses".....Romano
"Madonna Granducca" .....Raphael
"John" .....Andrea del Sarto
"Pharoah's Horses" .....Herring
"Denizens of the Highland".....Bonheur
"My Dog" .....Landseer
"Children of the Shell".....Murillo
"The Melon Eaters".....Murillo
"Christmas Presents" .....De Freger
"The Pet Bird".....Meyer Von Bremen
"Mother and Daughter".....Le Brun
"Wide Awake" .....J. Adam
"The Humble Servant".....Rosa Bonheur
"The Elder Sister".....Bougereau

GRADE IV.

"Dignity and Impudence".....Landseer
"The Return to the Farm".....Troyon
"Aurora" .....Guido Reni
"The Holy Night".....Correggio
"The Light of the World".....Holman Hunt
"The Broken Pitcher".....W. Greuze
"Going to Work".....Millet
"Suspense" .....Landseer
"The Wolfhound" .....Paul Potter
"By the Riverside".....Lerolle
"Ploughing" .....Bonheur
"Martha and George Washington".....Stuart
"The Dance of Nymphs." Evening.....Corot
"In The Wood".....Elizabeth Gardner
"My Dog" .....Landseer
"Toll Paid Here".....Meyer Von Bremen
"Who'll Buy a Rabbit".....Meyer Von Bremen
"Night and Morning".....Thorwaldsen

WORLD PICTURES

Many of the best artist critics of the world agree in naming a few out of the thousands and thousands of pictures as the masterpieces in art. This group is generally known by the title "The Twelve Great Pictures of the World."

These are Raphael's "Sistine Madonna", and "Transfiguration"; Michael Angelo's "Last Judgment"; Domenichino's "Last Communion of St. Jerome"; Volterra's "Descent from the Cross"; Leonardo's da Vinci's "Last Supper"; Titian's "Assumption of the Virgin"; Correggio's "Nativity", or "Holy Night"; Guido's "Aurora"; Guido's supposed "Portrait of Beatrice Cenci"; Murillo's "Immaculate Conception", and Ruben's "Descent from the Cross."

The Sistine Madonna has a room entirely to itself in the Dresden gallery. Viardot says: "This picture is like a revelation of heaven to earth; it is an *appearance* of the virgin. This word explains the whole rendering of the picture: the green curtains drawn aside in the upper part, the balustrade at the bottom, on which the two little angels lean, who seem by their upturned glance to point to the celestial vision. What noble attitudes, in what wonderfully graceful positions are the Virgin and Child in her arms, and also the two saints in adoration! What could be more thoughtful, pious and holy, than the venerable head of St. Sixtus? What could be more noble, more tender, and more graceful, than the holy martyr Barbara? What could be more astonishing, more superhuman, than the Child with the meditative forehead, with the serious mouth, and the fixed and penetrating eyes, allowing us to forebode his sublime mission—Redeemer of the world?

And is not Mary really a radiant and celestial being? Is she not an apparition? The irresistible power of moral beauty, which beams in the face of the Virgin mother, her deep glance, her look at once grave, modest, and sweet; that indefinable look which

MADONNA DI SAN SISTO, OR SISTINE MADONNA—*By Raphael*

marks the woman brought up far from the world, out of the world, and having never known its pomps or deceitful gaities."

The Aurora was painted by Guido Reni on the ceiling of the casino belonging to the Rospigliosi Palace, Rome. In Charlotte Eaton's "Rome in the Nineteenth Century" it is vividly described: "It is embodied poetry. The Hours, that hand-in-hand encircle the car of Phoebus, advance with rapid pace; Aurora sails on the golden clouds shedding showers of roses on the rejoicing earth. Above the heads of the heavenly coursers hovers the morning star, in the form of a youthful cherub bearing his flaming torch. Nothing is more admirable in this beautiful composition than the motion given to the whole. The smooth and rapid step of the circling Hours as they tread on the fleecy clouds; the fiery steeds; the whirling wheels of the car; the torch of Lucifer, blown back by the velocity of his advance; and the form of Aurora borne through the ambient air till you almost fear she should float from your sight—all realize the illusion. You seem admitted into the world of fancy and revel in its brightest creations." * * *

The teacher should study the masterpieces in literature and art in order to lead the children to question the poem and the picture again and again for the deeper meaning contained therein.

The following topics are suggested by Dr. Haney for "Picture study": What is the object of picture making? What thought did the artist aim to present—the soul of the picture? What is the main point of interest? What is the facial expression of the living forms in the picture? How far is the scene real,—how far has it been idealized? What of the past or the future is suggested in the picture? Has the picture any reminder of personal experience? Has the artist made the meaning plain? What have you to bring to the picture from your own feelings and emotions, from your own knowledge of what others have said or written or painted or sung? * * *

Study "The Sower" by Millet.

Discuss the preparation of the soil for grain, the importance of the seed, the conditions favorable for growth and similar topics, to lead children to realize something of the dignity and the importance of the sower and his work.

In "The Song of the Sower" Bryant says:

Fling wide the generous grain; we fling
O'er the dark mould the green of spring,
For thick the emerald blades shall grow,
When first the March winds melt the snow,
And to the sleeping flowers, below,
The early blue birds sing.

By questioning, lead children to appreciate the strength, confidence, and dignity revealed in the sower's attitude. The easy, matter-of-fact way in which he strides along makes us feel that his vigorous frame would not tire easily.

Millet knew nature's ways by heart and loved to paint the peasants plowing, sowing, and gleaning.

Help the children to discover Millet's message in this picture—*noble labor.*

"The Angelus" also dignifies labor.

Lord Houghton writes:

"Against the sunset glow they stand,
Two humblest toilers of the land,
Rugged of speech and rough of hand,
Bowed down by tillage;
* * O lowly pair! you dream it not
Yet on your hard unlovely lot
That evening gleam of light has shot
A glorious passage;
For prophets oft have yearned and kings
Have yearned in vain to know the things
Which to your simple spirits brings
That curfew message
* * * "enough for us
The two lone figures bending thus,
For whom that far off Angelus
Speaks Hope and Heaven."

When Millet first showed the picture, M. Sensier cried, "It is the Angelus!" "It is indeed," Millet answered; "you hear the bells."

An atmosphere of peace and prayer pervades the picture—he makes you see the sunset glow and hear the bells call to prayer.

THE BEAUTIFUL BELLS OF THE WORLD

The beautiful bells of the world,
The working bells!
Their music that's swelling and swelling,
A story tells
Of love alike for the strong and faint;
Of tender love for the sinner and saint;
Of prayerful love for the great and lowly;
Of a love divine, love deep and holy,
The working bells!

At morrow they call us to prayer
With music sweet;
In the busy hours of the day
The call repeat.
When the shadows fall and the day is done,
They sing adieu to the setting sun,
And tenderly greet the approach of light
With music sweet.

With zones of sound they girdle the earth
Angelus bells!
Oh the thoughts they bring as they ring and ring
The love that wells
In our hearts and souls when we hear their notes,
And catch the music that floats and floats
Over the world to the heavens above,
Telling low and clear of a Savior's love
Angelus bells!

—MRS. B. ELLEN BURKE.

If the guardians of children could but realize the significance of first impressions—realize that all the important affairs of life have their beginnings in unobserved utterances, which later form

the basis of character, there would be less misery and unhappi traceable to the perverted management of the young.

Wm. T. Harris declares that the humblest child—nay the r depraved child has within him the possibilities of the higl angelic being.

"Why is this glorious creature to be found
One only in ten thousand?
What one is
Why may not millions be?
What bars are thrown by nature in the way of such a hope?"

THE CHILDREN.

Ragged and dirty and saucy may be,
Born in a hovel or born over sea,
Robed in rich satin, or shabbily dressed,
Treasures of love dwell in each little breast,
Waiting to open: Seek, teacher, the key.
Feet that shall soon lead, to-day may be led,
Hands that shall govern are governed instead;
Minds whose ripe powers the nation shall sway,
Plastic, are taking your impress to-day;
Train them aright—they will rule when you're dead.

—E. C. HEWETT.

In order to train them aright the teacher needs all the grea inspirational influences. Let the children contemplate day by day the best of the best in literature and art and the true, the beautiful, and the good will elevate and ennoble their lives and serve as a strong and lasting foundation upon which to build ideal character.

l unhappi
g.
nay the s
the high

hope?"

T.
great
by
eau-
erve
leal